BOROUGH OF LEICESTER.

FIFTY-EIGHTH

ANNUAL REPORT

UPON THE

HEALTH OF LEICESTER,

For the Year 1906,

BY

C. KILLICK MILLARD, M.D., D.Sc.,

Medical Officer of Health; Medical Superintendent of the Borough Isolation Hospital; Public Analyst for the Borough.

ALSO

REPORT ON THE INFANTS' MILK DEPOT,

THE CHIEF INSPECTOR'S REPORT,

REPORT ON THE ISOLATION HOSPITAL,

AND

THE PUBLIC ANALYST'S REPORT.

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SUMMARY OF STATISTICS

For the Year 1906.

Population (estimated) at Mid-year 1906	232,111

Population at Census, 1901, 211,581.

Marriages	1,778
Marriage-rate	15·32
Births	5,865
Birth-rate (lowest on record)	25·26
Deaths (corrected for Institutions)	3,341
Death-rate	14·39

Average for previous ten years, 16·01.

Death-rate corrected for Age and Sex (Registrar General) 15·21.

Infant Mortality (per 1,000 births)	166·2

Average for previous ten years, 176·3.

Zymotic-rate	2·33

Average for previous ten years, 2·43.

Diarrhœa-rate	1·11
Phthisis-rate	1·46

76 LARGE TOWNS.

	Per 1000 living.
Average Death-rate for 1906	15·9
Average Zymotic Death-rate for 1906	2·24
	Per 1000 births.
Average Infant Mortality for 1906	145

Area of Borough (in acres)	8,586
Rateable value (1st October, 1906)	£1,091,669
Penny in £ produced	£3,980
Number of persons per acre at Census, 1901	24·6
Number of persons per House at Census, 1901	4·6
Number of Inhabited Houses, July, 1906	49,492
Number of Empty Houses, July, 1906	2,987

Borough extended in year 1891.

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TOWN HALL, LEICESTER,

April, 1907.

To the Chairman and Members of the Sanitary Committee.

Gentlemen,

I have the honour of presenting to you my Annual Report on the Health of Leicester for the year 1906. *The death-rate was again satisfactory, being only* 14·39 *per* 1,000. *Although slightly higher than the figure for the previous year, which was the lowest on record, viz.,* 13·42, *it compares favourably with the average for previous years.*

The Infant Mortality was 166·2 *per* 1,000 *births compared with an average of* 176·3 *in the previous ten years.*

Infantile Diarrhœa, though causing more deaths than during the last few years, was hardly as fatal as might have been expected considering the exceptionally hot and dry summer. Measles and Whooping Cough both caused more deaths than usual.

As regards Notifiable Diseases, the epidemic of Scarlet Fever, which began in 1905, *continued all through the year under review. Fortunately the disease, although unusually infectious, was of a mild type. Diphtheria was rather more prevalent than in the last few years. Enteric Fever was again below the average.*

As regards the Vital Statistics of the different districts in the town, Newton Ward continues to compare unfavourably with the rest of the Borough. The death-rate and infant death-rate were both higher than in any other Ward, as was also the birth-rate. In Aylestone Ward, the infant death-rate, as in the previous year, was much higher than it ought to be.

The Isolation Hospital was used to a very great extent, the number of patients admitted during the year being 1,765, *which is the largest number since the new hospital was opened. It was undoubtedly a great boon to the working classes in the Borough.*

Phthisis again caused a heavy mortality, the number of deaths ascribed to it being 339.

In July an Infants' Milk Depot was opened by your Committee in Belgrave Gate. The subject is dealt with in a special Report appended.

In conclusion, I wish to thank Chief Inspector Braley and his Staff, and Dr. Lambie and the Matron and the Staff at the Isolation Hospital for their loyal co-operation and assistance during the year which, especially for the hospital Staff, has been an unusually arduous one.

My best thanks are also due to the Chairman and Members of the Sanitary Committee for their very kind appreciation of my work during the year.

I am, Gentlemen,

Your obedient Servant,

C. Killick Millard

Medical Officer of Health.

MEDICAL OFFICER OF HEALTH'S REPORT.

1906.

PART I.

STATISTICAL.

POPULATION.

The population of the Borough for the year 1906, as estimated by the Registrar General's method, was 232,111, and it is upon this figure that the vital statistics of the town have been calculated.

As it is five years since the last Census, however, and as Leicester during that time has passed through a period of trade depression, it is probable that the above estimate is rather too high, though the excess, if any, is not likely to materially affect the validity of the statistics.

A rough estimate of the population, which serves as a check to the Registrar General's figure, can be arrived at from the number of inhabited houses. These numbered 49,492 in July, 1906, and assuming the number of persons per house to be the same as at the last census, viz., 4·6, we get 227,663 as the population, or 4,448 less than the Registrar General's estimate.

MARRIAGES.

The number of marriages solemnised in the Borough during the year was 1,778, equivalent to a *Marriage-rate* of **15·32.** This is 1·21 lower than in the previous year and is the lowest rate on record.

MARRIAGES, 1906.

First Quarter	259
Second Quarter	533
Third Quarter	525
Fourth Quarter	461

BIRTHS.

The number of births registered during the year was 5,865, of which 2,912 were males, and 2,953 were females. This number is 23 less than in the previous year, and is the smallest number for any year since 1892, when the population was, of course, very much smaller than it is now.

The *Birth-rate* was **25·26** per 1,000 population, which is again the lowest rate hitherto recorded. The birth-rate has reached such a low figure that in spite of the increasing population, the number of children born in Leicester has for the last four years been on the decline.

Year.	Births.
1902	6,313
1903	6,018
1904	5,981
1905	5,888
1906	5,865

The number of *Illegitimate Births* was 218, equal to 3.7 per cent. of the total births.

DEATHS.

The number of deaths of residents of Leicester after correcting for Public Institutions* was **3,341,** of which 1,761 were males, and 1,580 were females.

---

* Sixty-six deaths of inmates of the County Asylum, and 179 inmates of the Leicester Infirmary, not being residents of Leicester, have been deducted; whilst 64 deaths of residents of Leicester occurring at the Borough Isolation Hospital, and 274 deaths at the Poor Law Infirmary at North Evington (both of which institutions are outside the Borough) have been included.

The *Death-rate* was **14·39** per 1,000 population. Although this is nearly 1·0 per 1,000 higher than in 1905, when the rate was only 13·42 (the lowest on record), it is nevertheless a very favourable figure, and compares well with the average for the previous ten years, which was 16·04. It is all the more satisfactory in that the past summer was exceptionally hot and dry, and therefore predisposed to a high infant mortality.

DEATH-RATE IN OTHER GREAT TOWNS.

Leicester continues to compare very favourably with other great towns as regards general mortality. For several years a table has been given in this Report showing the death-rates in the large towns with populations of over 100,000. In 1906 only four of these towns had a lower death-rate than Leicester, viz., Croydon, Derby, Cardiff, and Bristol. In order to show how very favourable Leicester's position in this respect really is, I have calculated the average death-rate in all the great towns for the last five years, after correcting for age and sex distribution. The six towns with the lowest rates are given below.

Town.	Average Death-rate, 1902-6.
Croydon	13·43
Brighton	14·70
Leicester	15·19
Derby	15·39
Bristol	15·63
Cardiff	15·91

That the only great towns with a lower average death-rate than Leicester during the last five years should be places like Croydon—a residential suburb of London, and Brighton—a health resort, speaks for itself. Such a position is indeed very remarkable, and is one of which those who have been responsible for bringing the town of Leicester into its present sanitary condition have just reason to be proud.

CAUSES OF DEATH DURING 1906.

The following are the principal causes of death, with the number of deaths attributed to each, during 1906. The figures are shown graphically on the accompanying diagram :—

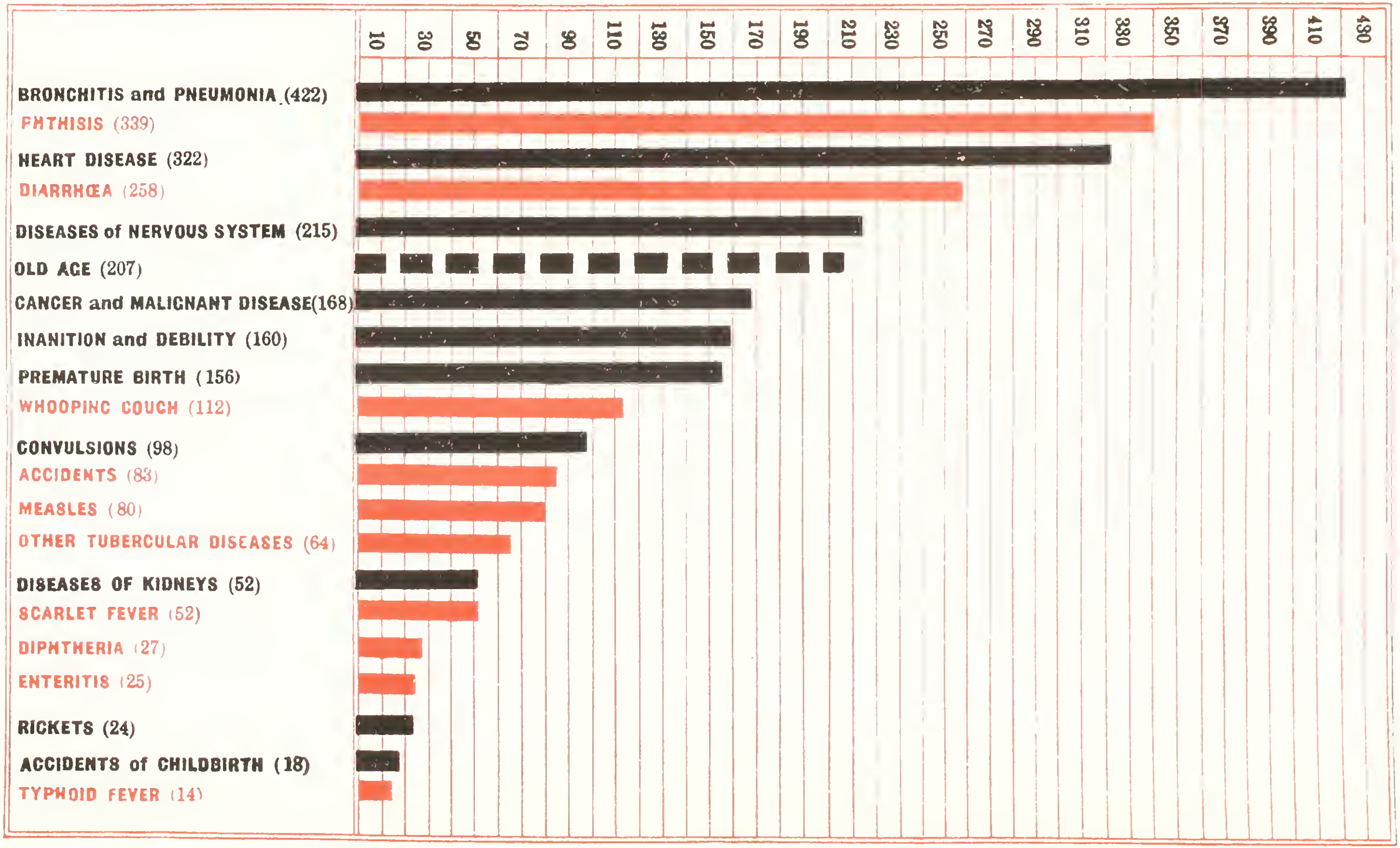
PRINCIPAL CAUSES OF DEATH IN 1906.

Bronchitis and Pneumonia	422
Phthisis	339
Heart Disease	322
Diarrhœa	258
Apoplexy and Diseases of the Nervous System (exclusive of convulsions)	215
Old Age	207
Cancer and Malignant Diseases	168
Inanition and Debility	160
Premature Birth	156
Whooping Cough	112
Convulsions	98
Accidents	83
Measles	80
Other Tubercular Diseases	64
Diseases of Kidney	52
Scarlet Fever	52
Diphtheria	27
Enteritis	25
Rickets	24
Accidents of Childbirth, etc.	18
Typhoid Fever	14
All other causes	445
Total	3,341

In this Table the causes which are presumably preventable have been *underlined*, whilst in the Diagram they are shown in *red*.

DIAGRAM shewing PROPORTION of DEATHS from the principal causes during year 1906.

("Preventable" causes in Red.)



Bronchitis and Pneumonia head the list with 422 deaths, followed next, unfortunately, by Phthisis with 339. It is deplorable to think that so great a proportion of the total deaths 10 per cent. should be caused by this one disease. Heart disease comes third with 322 ; although classed as a non-preventable cause, improved conditions of living will probably help to reduce it. Diarrhœa comes fourth with 258 deaths, rather more than in the previous year ; next come diseases of the nervous system ; and then old age, a cause of death which ultimately we hope to see at the top of the list. It is essentially a non-preventable cause of death; of the 207 deaths attributed to this cause 106 were persons over 80 years of age, viz., 46 men, and 60 women. There are 74 additional deaths of persons over 80 years which were attributed to other causes, e.g., 19 to apoplexy, 16 to heart disease, 22 to bronchitis. Cancer and malignant disease account for 168 deaths, which is 12 less than in the previous year. Premature birth is credited with being the cause of 156 deaths. Although not usually reckoned as one of the preventable causes, there are good reasons for believing that many cases of prematurity could be prevented if proper care were taken of the mother during pregnancy. The great importance of pre-natal influences from a public health point of view is not sufficiently recognised. The too common practice of women continuing to work in the factory till within a few days of confinement is strongly to be deprecated ; indeed, the whole question of married women leaving their homes for the factory is one which some day will have to be dealt with. Scarlet fever, unfortunately, owing to the epidemic which has continued throughout the year, occupies a worse place than in the previous year, as is also the case with diphtheria.

INFANT MORTALITY.

The number of deaths of Infants under one year was 975, 548 being males and 427 females. This illustrates the well-known fact that though more males are born, more die, leaving the balance eventually in favour of the girls.

The *Infant Mortality*, or number of deaths of infants per 1,000 births, was 166·2, which is rather higher than the figures for the past few years, but much lower than used to be experienced.

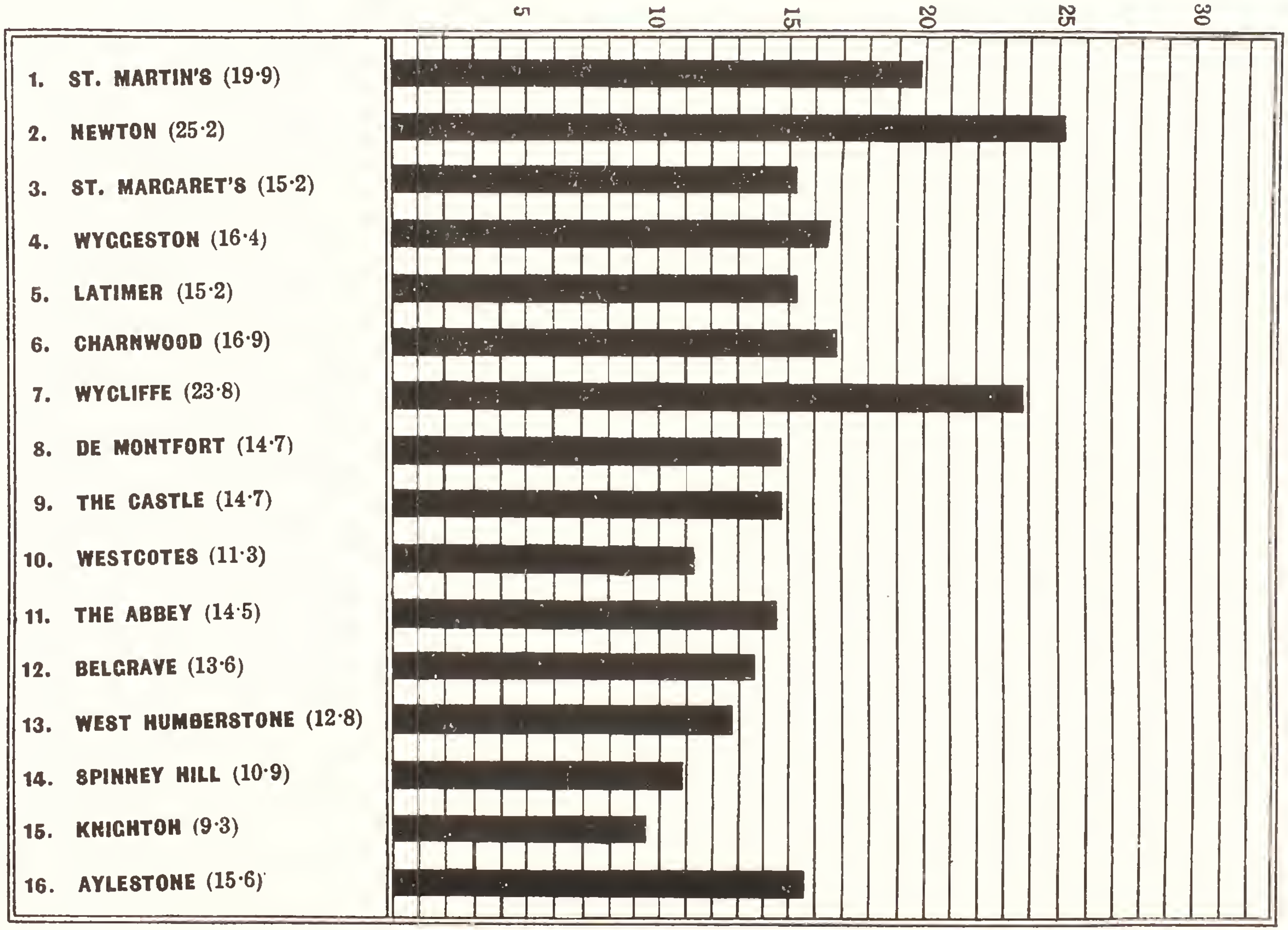
Year.	Deaths under one year per thousand births.	Average for five years.
1896	185·0	190·5.
1897	206·0	
1898	191·1	
1899	196·0	
1900	174·4	
1901	178·6	160·5.
1902	155·3	
1903	161·3	
1904	161·1	
1905	146·5	
1906	166·2	

The increase as compared with the past four years is to be attributed to the very hot and dry summer, which swelled the number of deaths from diarrhœa. Considering how unfavourable for infant life the summer was, we may, I think, congratulate ourselves that the rate was no higher. It is reasonable to attribute some saving at least to the work done at the Corporation Infants' Milk Depot.

TABLE SHOWING DEATHS OF INFANTS FROM VARIOUS CAUSES PER 1000 BIRTHS.

Period.	Atrophy and Debility.	Diarrhœa.	Convulsions.	Lung Diseases.	Premature Birth.	Tubercular Diseases.	Measles.	Whooping Cough.	Other Causes.	Total.
5 years 1896-1900	27·7	11 9	20·4	30·6	21·4	7·9	3·5	4·7	32·3	190·4
5 years 1901-1905	29·0	28·4	16·6	21·5	22·7	9·8	2·3	5 3	26·2	161·8
1906	21·7	38·0	13·5	19·3	26·6	5·3	4·4	8·9	28·6	166 3

DIAGRAM shewing DEATH-RATES in Municipal Wards in 1906.



ZYMOTIC MORTALITY.

There were 543 deaths due to the seven principal zymotic diseases, viz.:—

Smallpox	..	..	..	0 deaths.
Measles	..	..	..	80 ,,
Scarlet Fever		..	..	52 ,,
Diphtheria	..	..	..	27 ,,
Whooping Cough		..	..	112 ,,
Enteric Fever		..	..	14 ,,
Diarrhœa	..	..	..	258 ,,
Total		..	..	543

This yields a rate of 2·33, as compared with an average of 2·43 for the previous ten years. During the last four of these years, however, viz., 1902–5, the average has only been 1·66, the increase in 1906 as compared with these years being under the head of diarrhœa, whooping cough, measles, and scarlet fever.

WARD STATISTICS.

(Tables I to V.)

The more complete statistics for the various Wards of the Borough which were given in my last Annual Report for the first time are repeated for the year under review. I am able to give for each municipal ward (*a*) The general and zymotic death-rates; (*b*) the birth-rate; (*c*) the infant mortality.

For the boundaries of the different wards see the map at the end of the Report.

The only satisfactory way to estimate the population of the different wards in intercensal periods is by calculating it from the number of inhabited houses, allowing the same number of persons per house as was found to exist at the last census. The reason for this is that whilst some of the wards on the outskirts of the town are growing—some very rapidly—others in the centre of the town are stationary or actually decreasing. Thus, it will be seen by a reference to Table I, that during the five years since the last census, Newton and Wyggeston Wards have decreased to the extent of 217 and 250 houses, De Montfort and Wycliffe have decreased rather less, whilst on the other hand, Westcotes, The Abbey, Belgrave, West Humberstone, Spinney Hill, and Knighton have all increased, especially Westcotes. Indeed, nearly one-third of the total increase of inhabited houses during the past five years has occurred in this ward ; the total increase of inhabited houses for the whole Borough being 3,945, and the increase in Westcotes being 1,277. This shows how rapidly building operations have been carried on in this part of the town during recent years as compared with other parts of the Borough.

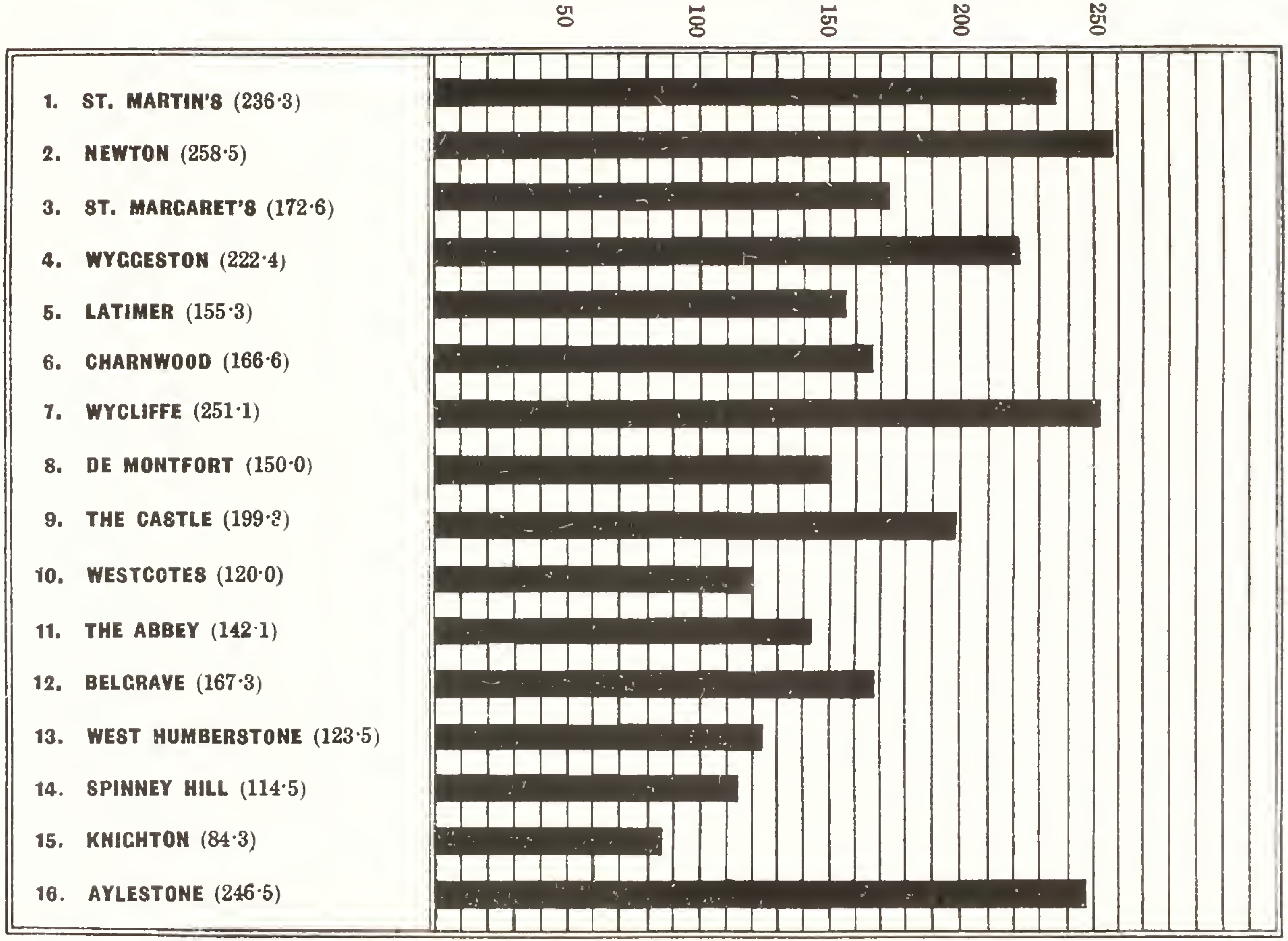
WARD DEATH-RATES.

These are shown in Table IV, page 24. We see the same significant contrasts as have been noted in previous years. Newton Ward again comes out much worse than any of the other wards, with a death rate of 25·2. Wycliffe Ward comes second with 23·8, and St. Martin's third with 19·9. These last two wards, however, do not usually come out so badly. The wards with the lowest death-rate were Knighton (as usual) with only 9·3 ; Spinney Hill 10·9 ; Westcotes 11·3 ; and West Humberstone 12.8.

WARD BIRTH-RATES AND INFANT DEATH-RATES

Newton Ward again shows the highest infant death-rate, viz., 258 per 1,000 births, and this ward has also the highest birth-rate, viz., 34·1. On the other hand, Knighton Ward has the lowest infant death-rate, viz., 84·3—and its birth-rate is one of the lowest, viz., 18·9. Next highest to Newton Ward was Wycliffe, with an infant death-rate of 251·1, and Aylestone with 246·5. The latter ward had an abnormally high rate in the previous year, and as was then pointed out, it is very surprising and regrettable that a comparatively new district, so favourably situated as Aylestone is, being quite rural in its surroundings, should show such a high infant mortality. I believe that the explanation is largely a social one, and is to be found in the character of the population, rather than in any local sanitary conditions. It is noteworthy that the general death-rate in Aylestone Ward is not excessive.

DIAGRAM shewing INFANT DEATH-RATES in Municipal Wards.



MUNICIPAL WARDS. TABLE I.

AREA, NUMBER OF INHABITED HOUSES AND POPULATION.

WARD.	Area in Acres.	No. of Inhabited Houses Census 1901.	No. of Inhabited Houses July, 1906.	Increase in Inhabited Houses during 5 years.	Decrease in Inhabited Houses during 5 years.	No. of Persons per House Census 1901.	Population Census 1901.	Estimated Population, 1906.
1. St. Martin's	81	808	772	...	36	4·69	3791	3512
2. Newton	153	2412	2225	...	217	4·23	10330	9411
3. St. Margaret's	274	2789	3031	242		4·53	12639	13730
4. Wyggeston	111	3594	3344	...	250	4·42	15890	14780
5. Latimer	250	3569	3573	4	...	4·84	17275	17293
6. Charnwood	116	1988	1978	...	10	4·56	9084	9049
7. Wycliffe	147	2760	2690	...	70	4·27	11810	11486
8. De Montfort	350	1764	1690	...	74	4·48	7907	7571
9. The Castle	370	3178	3199	21	...	4·52	14384	14459
10. Westcotes	801	3713	4990	1277	...	4·51	16752	22504
11. The Abbey	891	3756	4178	422	...	4·82	18116	20137
12. Belgrave	1013	3046	3548	502	...	4·54	13849	16107
13. West Humberstone	887	3336	3799	463	...	4·71	15717	17893
14. Spinney Hill	702	4535	5148	613	...	4·69	21279	24144
15. Knighton	910	2236	3010	774		4·57	10221	13755
16. Aylestone	1530	2033	2317	284	..	4·84	9860	11214

MUNICIPAL WARDS. TABLE II.

DEATH-RATES, ZYMOTIC-RATES, DIARRHŒA-RATES AND PHTHISIS-RATES IN 1906.

WARD.	Death-rate (all causes).	Zymotic-rate.	Diarrhœa-rate.	Phthisis-rate.
1. St. Martin's ...	19·9	1·4	1·7	2·3
2. Newton ...	25·2	2·4	1·0	2·4
3. St. Margaret's ...	15·2	2·2	1·3	2·1
4. Wyggeston ...	16·4	1·2	2·0	2·0
5. Latimer ...	15·2	2·0	2·0	1·4
6. Charnwood ...	16·9	·9	·9	2·1
7. Wycliffe ...	23·8	·6	1·2	2·1
8. De Montfort ...	14·7	·5	·9	1·8
9. The Castle ...	14·7	1·7	·8	2·0
10. Westcotes ...	11·3	·7	·5	1·0
11. The Abbey ...	14·5	1·6	1·2	1·2
12. Belgrave ...	13·6	1·7	·6	1·6
13. West Humberstone	12·8	·7	·9	·8
14. Spinney Hill ...	10·9	1·1	·6	·8
15. Knighton ...	9·3	·0	·2	·6
16. Aylestone ...	15·6	1·1	·3	1·5

N.B.—The deaths occurring in the Leicester Infirmary have been distributed to their respective wards. Those occurring in the Workhouse and Workhouse Infirmary and in the Borough Asylum, have had to be excluded, as the addresses of the patients are not obtainable. In the case of Wards 7 and 13 a deduction has been made from the population on account of the inmates of the Workhouse and Asylum respectively.

In 1904 the Union Infirmary was transferred to North Evington, just outside the Borough, and the deaths there are now distributed to their respective wards.

TABLE III.

Births, Deaths and Deaths under 1 year in each Municipal Ward in 1906 and previous years.

	Name of Ward.	1899		1900		1901		1902		1903		1904		1905			1906		
		Total Deaths	Deaths under 1 year	Total Deaths	Deaths under 1 year	Total Deaths	Deaths under 1 year	Total Deaths	Deaths under 1 year	Total Deaths	Deaths under 1 year	Total Deaths	Deaths under 1 year	Total Births	Total Deaths	Deaths under 1 year	Total Births	Total Deaths	Deaths under 1 year
1.	St. Martin's	69	17	59	22	53	17	17	13	41	10	53	13	55	47	9	55	70	13
2.	Newton	254	91	258	97	214	85	192	85	202	87	219	91	305	205	80	321	238	83
3.	St. Margaret's	299	126	279	85	192	69	188	82	198	79	210	74	387	202	66	417	210	72
4.	Wyggeston	351	163	339	143	271	126	278	119	236	101	240	101	500	236	100	490	243	109
5.	Latimer	298	100	335	125	288	109	293	104	244	91	266	84	495	233	75	515	264	80
6.	Charnwood	154	13	90	19	101	24	107	30	133	31	121	30	194	111	22	210	153	35
7.	Wycliffe	142	54	207	56	194	67	172	50	157	58	138	62	302	167	48	223	261	56
8.	De Montfort	129	36	91	10	110	18	93	14	85	12	94	9	100	92	9	100	112	15
9.	The Castle	253	77	257	78	249	75	185	58	172	49	191	55	370	170	47	316	213	63
10.	Westcotes	217	71	189	61	182	59	192	54	202	63	218	58	483	225	56	508	255	61
11.	The Abbey	270	102	313	91	273	117	250	120	235	114	262	102	584	237	86	591	292	84
12.	Belgrave	252	80	258	95	193	64	194	65	175	72	207	81	478	199	72	502	220	84
13.	West Humberstone ...	204	96	257	69	242	104	174	64	180	61	176	59	514	212	60	518	159	64
14.	Spinney Hill	269	90	261	67	295	95	276	77	213	45	257	48	547	230	42	550	264	63
15.	Knighton	92	24	87	19	106	18	95	22	101	27	112	29	258	99	24	261	129	22
16.	Aylestone	157	66	122	52	128	45	137	44	142	82	143	78	316	145	67	288	174	71
	Whole Borough ...	3727	1230	3729	1083	3338	1098	3172	981	3065	971	3266	961	5888	3062	863	5865	3341	975

N.B. In order to make a fair comparison, all the deaths at the Borough Asylum and Union Workhouse have been subtracted.

TABLE IV.

Death-rates in each Municipal Ward in 1906 and previous six years; also Birth-rates and Infant Mortality for 1905-6.

	Name of Ward.	1900	1901	1902	1903	1904	1905			1906		
		Death Rate.	Death Rate.	Death Rate.	Death Rate.	Death Rate.	Death Rate.	Birth Rate.	Infant Mortality.	Death Rate.	Birth Rate.	Infant Mortality.
1.	St. Martin's	15·5	12·9	12·3	10·8	13·9	11·7	13·7	163·6	19·9	15·6	236·3
2.	Newton...	25·0	20·7	18·5	19·5	19·7	20·9	31·1	262·3	25·2	34·1	258·5
3.	St. Margaret's	22·1	15·1	14·7	15·6	17·8	14·7	28·2	170·5	15·2	30·3	172·6
4.	Wyggeston	21·3	17·0	17·8	14·8	13·9	15·6	33·1	200·0	16·4	33·1	222·4
5.	Latimer...	19·3	16·6	16·9	14·1	15·6	13·5	28·7	151·5	15·2	29·7	155·3
6.	Charnwood	9·8	11·1	11·7	14·6	15·1	12·3	21·5	113·4	16·9	23·2	166·6
7.	Wycliffe	19·3	18·1	16·0	14·6	13·0	15·5	25·8	158·9	23·8	19·4	251·1
8.	De Montfort	11·8	13·9	11·7	10·7	12·8	11·7	12·8	90·0	14·7	13·2	150·0
9.	The Castle	17·8	17·2	12·8	11·9	13·8	11·6	25·3	127·0	14·7	21·8	199·3
10.	Westcotes	11·2	10·8	11·4	12·0	12·7	10·3	22·2	115·9	11·3	22·5	120·0
11.	The Abbey	17·3	15·0	15·8	12·9	14·1	12·0	29·6	147·3	14·5	29·3	142·1
12.	Belgrave	18·7	13·9	14·0	12·6	14·6	12·4	29·8	150·6	13·6	31·1	167·3
13.	West Humberstone ...	17·1	17·4	11·5	11·9	10·8	8·1	29·0	116·7	12·8	28·9	123·5
14.	Spinney Hill	12·2	13·8	12·9	11·1	11·8	9·6	22·9	76·8	10·9	22·7	114·5
15.	Knighton	8·5	10·3	9·2	9·8	11·1	7·5	19·5	93·0	9·3	18·9	84·3
16.	Aylestone	12·3	12·9	13·8	14·4	15·5	13·1	28·7	212·0	15·6	25·6	216·5
	Whole Borough ...	17·0	15·7	14·6	13·9	11·5	13·4	25·8	146·5	14·39	25·26	166·2

Note.—In calculating the rates for the years 1900-1904, the Census Population, 1901, has been used.

For the years 1905-6 the population has been calculated from the number of inhabited houses.

Wycliffe Ward contains the Union Workhouse. The deaths in the Workhouse have been subtracted but not distributed. A correction has been made for the population of the Workhouse—1100.

West Humberstone Ward contains the Borough Asylum. The Asylum deaths have been subtracted but not distributed, and a correction made for the population of the Asylum—700.

TABLE V.

Deaths in each Ward from the chief Zymotic Diseases in 1906.

Name and Number of Ward.	Small Pox.	Whooping Cough.	Measles.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Diarrhœa.	Totals.
1. St. Martin's	...	2	1	...	...	2	6	11
2. Newton	...	10	7	3	2	...	38	60
3. St. Margaret's	...	9	7	8	2	3	19	48
4. Wyggeston	...	9	8	...	...	1	30	48
5. Latimer	...	13	12	4	3	3	35	70
6. Charnwood	...	4	2	3	...	...	9	18
7. Wycliffe	...	4	1	2	...	...	14	21
8. De Montfort	...	1	..	2	...	1	7	11
9. Castle	...	9	8	6	3	...	13	39
10. Westcotes	...	2	5	7	2	...	12	28
11. The Abbey	...	16	4	4	6	2	25	57
12. Belgrave	...	6	13	5	4	...	10	38
13. West Humberstone ...	...	7	3	2	1	...	17	30
14. Spinney Hill	...	13	7	5	2	1	16	44
15. Knighton	...	...	...	...	...	...	3	3
16. Aylestone	...	7	2	1	2	1	4	17
Whole Borough	...	112	80	52	27	14	258	543

Deaths at Borough Isolation Hospital have been distributed to their respective wards.

TABLE VI.

Vital Statistics of the Great Towns of over 100,000 Population for 1906 (arranged in Alphabetical Order).

(From figures published in "Public Health," February, 1907.)

TOWNS.	Estimated Population, 1906.	Death-rate (corrected for Institutions only.	Birth-rate.	Deaths under one year per 1000 Births.	Death-rates per 1000 persons living from: Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Enteric Fever.	Diarrhœa.	Phthisis.	Other Tubercular Diseases
London	4,721,217	......	26·6	132	......	0·40	0·11	0·14	0·26	0·05	0·95	1·47	0·55
Birkenhead	......	......	......	......	......	......	......	......	......	......	......	......	......
Birmingham	518,022	16·7	29·2	168	......	0·41	0·10	0·16	0·46	0·06	1·56	1·22	0·38
Blackburn	133,583	16·1	25·6	156	......	0·47	0·24	0·19	0·12	0·11	1·27	0·92	0·58
Bolton	180,502	15·5	25·5	138	......	0·01	0·09	0·13	0·11	0·22	1·15	1·11	0·55
Bradford	288,544	16·1	20·6	152	......	0·44	0·15	0·21	0·13	0·18	0·92	1·30	0·41
Brighton	128,095	14·4	22·3	111	......	0·22	0·02	0·10	0·17	0·02	0·55	1·42	0·58
Bristol	363,233	11·3	25·8	128	......	0·38	0·07	0·22	0·28	0·05	0·58	1·11	0·37
Burnley	102,914	19·7	27·6	213	......	1·13	0·11	0·11	0·26	0·10	2·48	1·36	0·53
Cardiff	183,823	11·2	27·2	135	......	0·01	0·01	0·07	0·35	0·07	0·82	1·24	0·52
Croydon	151,011	13·4	25·7	125	......	0·25	0·06	0·26	0·18	0·03	1·68	1·14	0·10
Derby	123,981	11·0	25·0	114	......	0·01	0·03	0·51	0·23	0·08	0·63	0·91	0·45
Gateshead	......	......	......	......	......	......	......	......	......	......	......	......	......
Halifax	108,000	15·5	19·2	118	......	0·49	0·05	0·38	0·05	0·03	0·28	1·12	0·39

Hull	262,126	17·4	29·6	161	0·03	0·25	0·03	0·51	0·28	0·19	1·56	1·09	0·46
Leeds	163,195	15·8	26·1	152	......	0·60	0·07	0·16	0·32	0·11	0·97	1·23	0·66
Leicester ...	**232,111**	**14·4**	**25·3**	**166**	.....	**0·34**	**0·22**	**0·11**	**0·48**	**0·06**	**1·11**	**1·46**	**0·39**
Liverpool	739,180	20·3	32·6	171	......	0·77	0·25	0·20	0·18	0·10	1·87	1·58	0·50
Manchester	637,520	......	29·0	166	......	0·74	0·17	0·20	0·30	0·13	1·52	1·71	0·63
Newcastle-on-Tyne ...	......	......	......	......	......	......	......	......	......	......	......	......	
Norwich	117,958	16·7	26·0	176	......	0·83	0·09	0·22	0·16	0·09	1·40	1·61	0·79
Nottingham	254,567	16·0	26·5	171	......	0·01	0·06	0·15	0·15	0·16	1·48	1·23	0·38
Oldham	......	......	......	......	......	......	......	......	......	......	......	......	......
Portsmouth	205,118	14·8	28·6	130	......	0·04	0·01	0·29	0·31	0·08	1·10	1·00	0·33
Plymouth	......	......	......	......	......	......	......	......	......	......	......	......	......
Preston	116,339	19·2	28·5	200	......	1·04	0·13	0·14	0·09	0·18	1·61	1·04	0·86
Salford...	......	......	......	......	......	......	......	......	......	......	......	......	......
Sheffield	447,951	16·7	29·9	158	......	0·17	0·51	0·18	0·24	0·11	1·72	1·01	0·46
Southampton	117,312	13·2	21·8	113	......	......	......	0·20	0·30	0·06	0·82	1·31	0·43
South Shields	111,102	17·8	31·7	150	......	0·97	0·05	0·27	0·35	0·08	1·14	1·48	0·68
Sunderland	154,251	18·5	34·8	140	......	0·10	0·02	0·23	0·36	0·13	1·12	1·52	0·62
Swansea	100,690	17·9	31·9	156	......	0·27	0·00	0·07	0·50	0·09	0·82	1·47	0·64
West Ham	301,617	15·3	30·5	149	.....	0·40	0·12	0·29	0·23	0·17	1·91	1·14	0·66
Wolverhampton ...	100,867	14·7	27·1	140	......	0·27	0·16	0·22	0·19	0·07	1·28	0·79	0·46

TABLE VI. (a.)

VITAL STATISTICS OF ENGLAND AND WALES FOR 1906.

	Annual Rates per 1000 Living.										Infant Mortality.
	Births.	Deaths. All Causes.	Deaths from seven principal Epidemic Diseases.	Smallpox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Fever.	Diarrhœa.	Deaths under one year per 1000 Births.
England and Wales ...	27·0	15·4	1·73	......	0·27	0·10	0·17	0·23	0·09	0·87	133
76 Great Towns	27·8	15·9	2·24	......	0·10	0·12	0·19	0·28	0·09	1·16	115
142 Smaller Towns... ...	26·5	14·5	1·71	......	0·22	0·09	0·17	0·20	0·09	0·94	138
England and Wales, less the 218 Towns	26·3	15·1	1·18	......	0·11	0·08	0·16	0·19	0·09	0·52	116

TABLE VII.

Showing mean Weekly Temperature of Earth at Depth of 1 ft. and 4 ft. for the Year 1906.

Week ending.	1 foot.	4 feet.	Number of Deaths per week from Diarrhœa.
May 5	50·6	48·6	...
„ 12	51·4	49·1	...
„ 19	52·0	49·5	...
„ 26	...	...	...
June 2	..	...	1
„ 9	58·0	52·1	...
„ 16	...	53·2	1
„ 23	...	54·0	1
„ 30	...	55·0	...
July 7	...	56·0	1
„ 14	...	58·0	1
„ 21	...	58·7	1
„ 28	...	59·2	2
Aug. 4	...	60·0	3
„ 11	...	60·0	10
„ 18	61·5	61·1	18
„ 25	60·0	61·0	32
Sept. 1	61·5	60·5	35
„ 8	66·0	60·0	46
„ 15	62·5	59·5	28
„ 22	57·2	58·2	30
„ 29	55·0	56·0	11
Oct. 6	53·0	56·0	6
„ 13	52·0	56·0	8
„ 20	51·0	54·0	1

TABLE VIII.

Weekly Deaths from Diarrhœa from 1895–1906.

Week of the Year.		1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906
25th	..	4	7	0	1	1	3	1	2	0	0	0	1
26th	..	11	11	0	2	5	2	1	3	1	1	0	0
27th	..	19	20	1	1	1	4	1	2	0	1	1	1
28th	..	28	14	10	4	3	4	2	1	0	2	3	1
29th	..	28	35	7	4	4	12	4	1	3	5	3	1
30th	..	38	51	13	14	11	21	15	2	1	8	15	2
31st	..	37	49	21	18	24	16	17	0	9	21	18	3
32nd	..	26	16	41	32	25	25	17	0	9	30	33	10
33rd	..	18	14	53	28	31	27	24	2	9	43	24	18
34th	..	25	15	60	35	46	38	22	2	12	31	25	32
35th	..	22	8	48	48	36	38	27	3	15	30	25	35
36th	..	18	6	37	31	42	24	29	4	8	24	18	46
37th	..	23	1	28	32	17	12	16	6	10	24	15	28
38th	..	24	1	15	24	7	18	6	10	8	13	9	30
39th	..	6	2	7	10	3	11	8	19	6	8	3	11
40th	..	8	1	2	13	2	7	10	16	6	7	1	6
41st	..	10	1	3	4	3	4	5	19	2	3	1	8
42nd	..	5	2	0	3	3	2	2	10	1	6	3	1
43rd	..	3	0	1	3	1	3	2	8	2	4	1	4
44th	..	1	0	0	6	0	1	1	5	0	2	0	1

TABLE IX.

LEICESTER BOROUGH.

Showing estimated Population, Marriage-rates, Birth-rates, and Death-rates (General and Zymotic) per 1000 living during the last 62 years, 1845–1906.

Year.	Estimated Population.	Marriage Rate.	Birth Rate.	Death Rate.	Zymotic (Death) Rate.
1845	54,737	24·04	40·14	30·85	9·07
1846	55,707	21·00	39·72	29·48	8·11
1847	56,696	18·80	35·36	25·69	4·12
1848	57,705	20·86	34·71	25·77	5·87
1849	58,736	21·58	36·96	28·73	7·05
1850	59,788	24·04	37·45	23·64	4·13
1851	60,760	21·11	40·11	25·57	5·48
1852	61,467	22·96	38·83	28·84	8·42
1853	62,181	22·90	36·71	27·02	5·45
1854	62,903	20·40	39·06	25·11	6·65
1855	63,624	19·14	36·16	23·55	2·87
1856	64,366	20·02	37·32	21·16	3·10
1857	65,119	20·60	37·48	27·58	8·19
1858	65,835	19·14	34·54	28·76	8·07
1859	66,663	22·56	37·77	24·59	4·99
1860	67,456	19·80	38·05	20·47	1·27
1861	68,638	18·58	37·01	25·25	5·71
1862	70,986	21·30	38·37	23·38	3·01
1863	73,413	25·74	40·00	29·95	7·96
1864	75,922	25·68	41·01	26·96	5·41
1865	78,516	25·38	41·09	25·02	5·20
1866	81,197	24·94	42·02	23·33	3·37
1867	83,970	22·18	41·66	24·59	4·31
1868	86,837	22·62	41·32	28·15	7·88
1869	89,804	21·12	41·87	25·60	5·10
1870	92,873	21·22	40·90	27·33	7·24
1871	95,823	23·06	41·55	26·07	5·83
1872	98,251	23·90	42·36	26·95	8·23
1873	100,741	24·00	44·14	23·83	5·05
1874	103,294	20·90	42·34	24·29	3·83
1875	105,913	22·36	40·31	27·28	6·56
1876	108,599	22·64	44·02	23·58	5·26
1877	111,355	21·24	42·68	23·48	3·21
1878	114,182	19·38	41·85	21·89	4·18
1879	117,083	19·48	40·11	22·64	3·06
1880	120,059	19·60	40·04	24·73	6·48
1881	123,146	18·66	38·26	21·55	4·45
1882	126,275	19·02	38·46	20·04	3·23

TABLE IX.—Continued.

Year.	Estimated Population.	Marriage Rate.	Birth Rate.	Death Rate.	Zymotic (Death) Rate.
1883	129,483	18·64	37·26	19·18	2·56
1884	132,773	17·34	36·53	22·12	4·20
1885	136,147	16·36	34·39	19·39	3·32
1886	139,606	17·46	34·80	19·62	2·81
1887	143,153	16·60	32·79	19·10	3·05
1888	146,790	15·48	32·79	18·16	2·45
1889	150,520	16·08	31·82	16·63	2·30
1890	154,344	16·52	30·44	17·79	2·18
1891*	177,353†	19·16	33·58	21·22	3·39
1892‡	180,550	16·71	32·21	18·00	2·57
1893	183,900	15·85	32·65	19·72	3·56
1894	187,250	16·70	32·01	14·57	1·93
1895	190,600	16·41	31·28	17·41	3·01
1896	194,100	17·52	32·00	16·88	2·98
1897	197,600	16·78	31·63	17·98	1·97
1898	201,250	17·78	30·56	17·29	3·41
1899	204,900	17·58	30·61	18·18	3·41
1900	208,600	17·30	29·75	17·87	3·60
1901	212,498	17·17	29·03	15·71	2·34
1902	216,389	16·19	29·17	14·65	1·54
1903	220,272	16·20	27·31	13·91	1·53
1904	224,186	16·46	26·67	14·56	1·95
1905	228,132	16·53	25·81	13·42	1·64
1906	232,111	15·32	25·28	14·39	2·33

N.B.—The above figures, prior to the year 1890, are those supplied by Mr. J. T. Biggs to the Royal Commission on Vaccination, and are taken from the Commission's 4th Report.

* All figures after 1891 refer to extended Borough.

† This is the Population of the extended Borough. The figures in the other columns for same year refer to the old Borough.

‡ The figures for the nine years, 1892—1900, have been revised on the basis of the 1901 Census.

TABLE X.

Number of Deaths from certain specified causes in 1906 and eleven previous years.

	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906
Zymotic Diseases (except Diarrhœa)	222	331	291	389	132	519	297	222	205	177	171	291
Diarrhœa	369	272	360	323	292	286	224	137	133	289	211	258
Enteritis	50	68	112	86	109	90	78	42	52	35	32	25
Cancer	110	102	153	116	139	140	161	171	192	213	180	168
Phthisis	189	220	215	221	202	230	271	272	266	353	288	339
Apoplexy and Paralysis	158	151	179	164	187	164	182	207	179	201	165	185
Convulsions	142	147	185	170	151	131	159	120	117	107	89	98
Heart Disease	247	215	266	271	294	305	290	343	322	301	313	322
Bronchitis and Pneumonia ...	195	452	535	553	565	623	494	180	121	405	397	122
Premature Birth	156	109	151	131	143	135	130	151	154	111	147	156
Atrophy and Debility	185	226	202	166	209	187	201	191	168	187	173	160
Old Age	197	193	160	189	221	211	198	211	218	240	247	207
Violence	89	104	96	67	115	109	110	110	88	87	84	96
Ill-defined and not specified causes	35	16	36	19	23	38	42	53	15	49	48	85

TABLE XI.

Showing the number of Notification Certificates for the principal Zymotic Diseases for the thirteen years. 1894-1906.

Disease.	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906
Small Pox	9	4	0	0	0	0	0	4	9	106	321	5	1
Scarlet Fever	855	723	2110	1615	923	1247	839	758	826	533	554	1117	2301
Diphtheria	66	75	170	229	218	892	1452	1034	320	211	97	173	315
Enteric Fever	215	248	283	215	237	162	117	126	81	58	64	68	67
Erysipelas	171	202	261	218	230	341	306	181	225	214	239	253	158
Cholera	...	1	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	6	10	18	20	11	18	26	12	15	11	16	20	10
Totals	1322	1265	2815	2327	1619	2660	2710	2115	1176	1133	1291	1636	2852

TABLE XII.

Showing the Number of Deaths from Zymotic Diseases in the Twelve Years 1895 1906.

DISEASE.	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906
Small Pox	0	0	0	0	0	0	0	5	21	4	0	0
Measles	29	120	12	211	31	49	17	73	74	32	53	80
Scarlet Fever	15	48	73	44	42	28	6	11	15	4	36	52
Diphtheria	36	53	73	63	222	316	155	29	28	6	11	27
Whooping Cough	87	47	82	19	84	46	77	67	36	89	50	112
Enteric Fever	38	40	38	27	28	26	20	12	13	14	9	14
Diarrhœa	369	272	360	323	292	286	224	137	133	289	211	258
Erysipelas	6	10	6	9	13	5	5	6	9	6	3	2
Influenza	8	9	0	14	6	41	13	14	6	17	2	0
Puerperal Fever	3	4	7	2	6	8	4	5	3	5	7	4
TOTALS	591	603	651	712	724	805	521	359	338	466	382	549

TABLE XIII.

Showing the Number of Inhabited Houses, Marriages, Births, Deaths, Zymotic Deaths, and Deaths in Public Institutions.

Year.	No. of Inhabited Houses.	Marriages.	Registered Births.	Corrected Number of Deaths.			Deaths in Public Institutions.	Deaths from Seven Principal Zymotic Diseases.
				Total all Ages.	Under One Year.	Under Five Years.		
1889	29,407	1211	4789	2513	1004	1276	270	247
1890	30,175	1276	4699	2799	958	1263	271	337
1891	35,795	1366	4790	3026	1039	1533	230	484
1892	37,095	1509	5816	3250	1150	1658	393	466
1893	37,895	1458	6006	3627	1324	1768	450	726
1894	38,818	1564	5995	2730	971	1301	383	363
1895	39,438	1564	5962	3320	1232	1611	406	573
1896	40,349	1701	6212	3277	1154	1624	441	580
1897	41,519	1658	6252	3553	1288	1758	340	645
1898	44,472	1789	6152	3480	1183	1703	406	687
1899	44,585	1801	6273	3727	1230	1707	543	699
1900	44,884	1805	6207	3729	1083	1627	583	751
1901	45,547	1825	6169	3338	1098	1435	553	499
1902	47,712	1752	6313	3172	981	1303	473	334
1903	48,348	1785	6018	3065	971	1279	583	320
1904	49,043	1845	5981	3266	964	1255	601	438
1905	49,348	1886	5888	3062	863	1148	685	370
1906	49,492	1778	5865	3341	975	1397	667	543

NOTE. In 1891 (Census year) the Borough was extended.
No. of Inhabited Houses of old Borough was 29,288; of new Borough, 35,795.

TABLE XIV.

Showing the Annual Death-rates of Children, and proportion of Deaths in Public Institutions in a Thousand Deaths, for the past eighteen years.

In Year	Birth-rate per 1000 of the Population.	Death-rate per 1000 of the Population.	Deaths of Children under one year per 1000 Births, Infant Death-rate.	Deaths of Children under one year of age per 1000 of Total Deaths.	Deaths of Children under five years of age per 1000 of Total Deaths.	Deaths in Public Institutions per 1000 of Total Deaths.
1889	31·82	16·68	209·6	399·5	507·7	107·4
1890	30·44	17·79	203·7	342·2	451·2	96·7
1891	33·58	21·21	214·5	346·3	511·1	95·3
1892	32·21	18·00	197·7	353·8	510·1	120·9
1893	32·65	19·72	220·4	365·0	487·4	124·0
1894	32·01	14·57	161·9	355·6	476·5	140·2
1895	31·28	17·41	206·6	371·0	485·2	119·2
1896	32·00	16·88	185·7	352·1	495·5	134·5
1897	31·63	17·98	206·0	362·5	494·7	95·7
1898	30·56	17·29	191·1	311·2	489·3	116·6
1899	30·61	18·18	196·0	330·0	458·0	145·7
1900	29·75	17·87	174·4	290·4	436·3	156·3
1901	29·03	15·71	178·6	328·9	429·0	165·6
1902	29·17	14·65	153·3	327·0	410·7	145·3
1903	27·31	13·91	161·3	323·6	426·3	194·3
1904	26·67	14·56	161·1	298·2	384·2	184·0
1905	25·81	13·42	146·5	281·8	374·9	223·7
1906	25·26	14·39	166·2	296·8	418·1	199·6

TABLE XV.

Rates of Mortality of Children under one year of age from the chief Infantile Diseases, per 1000 Births

DISEASE.	1901		1902		1903		1904		1905		1906	
	Total Deaths.	Rate per 1000 Births.	Total Deaths.	Rate per 1000 Births.	Total Deaths.	Rate per 1000 Births.	Total Deaths.	Rate per 1000 Births.	Total Deaths.	Rate per 1000 Births.	Total Deaths.	Rate per 1000 Births.
From all causes	1098	178·6	981	155·3	971	161·3	964	161·1	863	146·5	975	166·2
Atrophy and Debility	194	31·1	179	28·3	168	27·9	180	30·0	164	27·8	127	21·7
Diarrhœa	192	31·1	121	19·1	116	19·2	218	41·1	186	31·5	223	38·0
Convulsions...	130	21·0	108	17·1	103	17·1	87	14·5	79	13·4	79	13·5
Lung Diseases	169	27·3	154	24·3	152	25·2	91	15·2	94	15·9	113	19·3
Premature Birth	130	21·0	151	23·9	154	25·5	111	18·5	147	24·9	156	26·6
Tubercular Diseases	53	8·5	85	13·1	71	11·7	49	8·1	45	7·6	31	5·3
Measles	6	·9	29	1·5	12	1·9	11	1·8	16	2·7	26	1·4
Whooping Cough	33	5·3	39	6·1	22	3·6	50	8·3	21	3·5	52	8·9

TABLE XVI

Total Deaths, Death-rate, and Percentage of Deaths, from the eight principal groups of Diseases.

DISEASE.	1903.			1904.			1905.			1906.		
	Total Deaths.	Rate per 1000 Living.	Relative Percentage of Total Deaths.	Total Deaths.	Rate per 1000 Living.	Relative Percentage of Total Deaths.	Total Deaths.	Rate per 1000 Living.	Relative Percentage of Total Deaths.	Total Deaths.	Rate per 1000 Living	Relative Percentage of Total Deaths.
Zymotic	359	1·6	11·9	481	2·1	14·7	398	1·7	12·9	569	2·5	17·03
Parasitic . ..	1	·0	·0	2	·0	·0	1	·0	0	1	·004	·02
Dietetic	6	·02	·2	10	·04	·3	9	·03	·2	9	·03	·2
Constitutional ...	621	2·8	20·7	725	3·2	22·1	630	2·7	20·5	646	2·8	19·3
Local	1369	6·2	45·6	1348	6·0	41·2	1306	5·7	42·6	1390	5·9	41·6
Developmental ...	576	2·2	19·2	551	2·5	17·2	586	2·5	19·1	545	2·3	16·3
Violence	88	·4	2·9	87	·3	2·6	84	·3	2·7	96	·4	2·9
Ill-defined	45	·2	1·5	49	·2	1·5	48	·2	1·5	85	·4	2·5

TABLE XVII.

ENTERIC FEVER.—Cases and Deaths in past years.

Year.	Population (in round numbers).	Cases Notified.	Deaths.	Cases per 1000 Pop.	Deaths per 1000 Pop.
1880	120,000	245	46	2·041	·383
1881	123,000	179	29	1·455	·235
1882	126,000	110	19	·873	·150
1883	129,000	85	10	·658	·117
1884	133,000	55	16	·413	·120
1885	136,000	216	36	1·588	·264
1886	140,000	141	19	1·007	·135
1887	143,000	222	31	1·552	·216
1888	147,000	266	32	1·809	·217
1889	151,000	147	22	·973	·145
1890	154,000	165	24	1·071	·155
1891	177,000	178	29	1·005	·163
1892	180,000	116	17	·644	094
1893	184,000	392	47	2·130	·255
1894	187,000	215	27	1·149	·144
1895	191,000	248	38	1·298	·198
1896	194,000	283	40	1·458	·206
1897	198,000	215	38	1·085	·191
1898	201,000	237	27	1·179	·134
1899	205,000	162	28	·790	·136
1900	209,000	117	26	·359	·124
1901	212,000	126	20	·594	·094
1902	216,000	81	12	·374	·055
1903	220,000	58	13	·263	·059
1904	224,000	64	14	·285	·062
1905	228,000	68	9	·298	·039
1906	232,000	67	14	·288	·060

TABLE XVIII.

Occupations of Persons aged Ten Years and upwards in Leicester.

CENSUS 1901.

MALES.	Number of Persons Engaged.
Commercial or Clerks	2020
Conveyance of Men, Goods and Messengers ..	6684
Agriculture, on Farms, Woods and Gardens ..	895
Engineering and Machine Making	2893
Cycles, Coaches and other Vehicles	661
Building and Works of Construction	7006
Wood, Furniture, Fittings and Decorations ..	1441
Brick, Cement, Pottery and Glass	253
Paper, Prints, Books and Stationery	1603
Hosiery Manufacture	3282
Other Textile Manufactures ..	781
Tailors..	1129
Boot, Shoe, Slipper, Patten and Clog-makers ..	17770
Food, Tobacco, Drink and Lodging	5187
All other Occupations	14374
Total Occupied ..	65979
Retired or Unoccupied ..	10270
Total, Occupied or Unoccupied ..	76249

TABLE XIX.

Primary Vaccinations Registered in Leicester, 1881-1906.

PRIMARY VACCINATIONS.				Total Number of Births.	No. of Exemptions granted.
Year.	Public.	Private.	Total.		
1881	1998	1119	3117	4860	..
1882	1710	1396	3106	4856	...
1883	1203	755	1958	4787	...
1884	994	769	1763	4921	...
1885	908	934	1842	4652	...
1886	611	511	1122	4857	...
1887	196	275	471	4679	...
1888	72	242	314	4787	...
1889	27	145	172	4789	...
1890	12	119	131	4699	...
1891	6	86	92	4790	...
1892	12	121	133	5816	...
1893	44	205	249	6006	...
1894	29	104	133	5995	...
1895	12	63	75	5692	...
1896	19	67	86	6212	...
1897	11	70	81	6252	...
1898	12	80	92	6152	...
1899	56	100	156	6273	167
1900	155	188	343	6207	598
1901	148	209	357	6169	500
1902	770	467	1237	6313	1500
1903	1859	628	2487	6018	1029
1904	753	529	1232	5981	1044
1905	378	609	987	5888	1112
1906	101	672	1073	5865	1080

TABLE XX.

Table showing the Number of Deaths from Tubercular Diseases in Leicester in the past Eighteen Years.

Year.	Phthisis.	Tabes Mesenterica.	Tubercular Meningitis.	Other Tubercular Diseases†	Total Tubercular Deaths.	Deaths per 1000 Population living.
1906	339	7	56	8	410	1·7
1905	288	10	63	14	375	1·64
1904	353	8	78	10	449	2·0
1903	266	7	101	3	377	1·7
1902	272	9	77	0	358	1·6
1901	271	15	62	3	351	1·6
1900	230	8	91	45	374	1·7
1899	202	18	81	30	331	1·5
1898	221	17	83	37	358	1·7
1897	215	16	73	44	343	1·7
1896	220	10	69	44	348	1·7
1895	189	21	80	40	330	1·7
1894	207	14	59	31	311	1·6
1893	250	17	83	40	390	2·1
*1892	216	21	65	38	340	1·8
1891	181	11	34	24	250	1·4
1890	197	15	26	29	267	1·7
1889	178	21	13	23	235	1·5

* The figures after the year 1891 refer to the extended Borough of Leicester.

† The apparent diminution in the number of deaths from "Other Tubercular Diseases" since 1901 is due to an alteration in classification, many deaths being allocated to the other headings, chiefly to "Phthisis." This largely accounts for the apparent increase in "Phthisis" in recent years.

TABLE XXI.

Age and Sex Distribution of Deaths from Phthisis in 1906.

Age Period.		Males.	Females.	Total.
0 to 5	...	16	10	26
5 „ 20	...	17	35	52
20 „ 40	...	97	63	160
40 „ 60	..	62	25	87
60 „ 80	...	9	5	14
Over 80	...	0	0	0
Total	...	201	138	339

Occupations of Persons Dying from Phthisis in 1906.

	M.	F.
SHOE TRADE:		
Finishers	23	...
Clickers	20	...
Rivetters	17	...
Pressmen	1	...
Machinists	...	6
Warehousemen ...	3	...
Various	7	1
Total in Shoes ...	71	7
Hosiery Trade* ...	6	18
Tailoring Trade ...	4	12
Shopkeepers	10	...
Labourers	9	...
Clerks	7	...
Grooms	6	...
Hawkers	4	1
Cigar Hands	...	4
Butchers	4	...

	M.	F.
Bricklayers	3	...
Travellers	2	...
Carpenters	2	...
House Decorators ...	3	...
Warehousemen ...	3	...
Mechanics	4	...
Cardboard Box Hands ...		2
Vanmen	3	...
Bakers	2	...
Hairdressers	2	...
Dyers	2	...
Stonemasons	2	...
Various	23	6
Occupations not stated (includes Married Women, Widows, Children, and Persons of no occupation)	29	88
Total	201	138

* A large number of *married* women are engaged in the Hosiery Trade, but these are not included, for in the case of deaths of married women and widows, only the husband's occupation is registered.

TABLE XXII.

Deaths in each Ward from Phthisis during the Ten Years, 1897-1906.

No. of Ward.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	Total Deaths from Phthisis in 10 years.	Average Annual Mortality.
1. St. Martin's	4	8	1	2	0	3	6	7	5	8	44	1·16
2. Newton	15	7	7	20	21	5	7	18	20	23	143	1·38
3. St. Margaret's	12	17	17	15	6	17	21	27	24	29	185	1·46
4. Wyggeston	15	18	12	18	19	23	29	35	30	31	230	1·44
5. Latimer	15	24	14	18	31	19	26	35	26	25	233	1·34
6. Charnwood	14	9	10	7	8	6	10	16	17	19	116	1·27
7. Wycliffe	41	35	37	37	32	45	41	47	38	25	278	2·26
8. De Montfort	6	10	2	6	6	3	8	12	9	14	76	·96
9. The Castle	15	13	20	23	28	28	16	21	19	29	262	1·82
10. Westcotes	9	10	12	10	12	19	19	25	18	23	157	·93
11. The Abbey	6	9	18	14	21	17	14	19	19	25	158	·87
12. Belgrave	14	12	10	17	15	10	8	13	13	26	168	1·35
13. *West Humberstone	20	15	17	15	25	18	15	19	14	16	174	1·10
14. Spinney Hill	17	19	15	18	25	25	22	25	15	20	201	·94
15. Knighton	5	9	4	6	9	19	6	10	7	9	84	·82
16 Aylestone	7	6	6	4	13	15	18	24	14	17	124	1·25
TOTAL	215	221	202	230	271	272	266	353	288	339	2653	1·26
Union Infirmary	25	25	30	27	16	32	28	43	33	51	310	...
Borough Asylum	8	4	2	2	5	5	7	11	12	5	61	...
Infirmary	3	3	2	5	8	11	4	6	6	9	57	...

* Ward 13 includes the Borough Asylum.

TABLE XXIII.

Scarlet Fever Statistics.

Year.	Actual Numbers Recorded.			Rates.				
	Deaths.	Cases Notified	Cases removed to Hospital	Deaths per 100,000 Pop.	Cases Notified per 50,000 Pop.	Cases Removed to Hospital per 50,000 Pop.	Percentage removed to Hospital	Percentage Fatality.
1877	33	...	38	29·6	...	17·1	...	...
1878	12	...	51	10·5	...	22·3	...	...
1879	105	...	247	89·9	...	105·5	...	...
1880	119	802	230	99·1	334·1	95·8	28·6	14·8
1881	184	1065	388	149·5	432·9	157·7	36·4	17·2
1882	72	763	460	57·1	302·7	182·5	60·2	9·4
1883	91	797	383	70·3	308·9	148·4	48·0	11·4
1884	63	701	354	47·5	263·5	133·1	50·4	8·9
1885	113	1816	900	82·9	667·6	330·8	49·5	6·2
1886	44	817	439	31·5	291·7	156·7	53·7	5·3
1887	5	272	151	3·5	95·1	52·7	55·5	1·8
1888	4	132	94	2·7	44·8	31·9	71·2	3·0
1889	6	409	327	3·9	136·3	109·0	79·9	1·4
1890	38	516	471	21·6	167·5	152·9	91·2	7·3
1891	17	794	636	9·6	224·2	179·6	80·1	2·1
1892	41	1331	733	22·6	367·6	202·4	55·0	3·0
1893	81	2308	none	44·0	627·1	none	...	3·5
1894	30	855	413	16·0	228·6	110·4	48·3	3·5
1895	15	723	445	7·8	189·2	116·4	61·5	2·0
1896	48	2110	1008	24·7	543·8	259·7	47·7	2·2
1897	73	1645	1048	36·8	415·4	264·6	63·7	4·4
1898	44	923	699	21·8	229·6	173·8	75·7	4·7
1899	42	1247	866	20·5	305·6	212·2	69·4	3·3
1900	28	839	571	13·3	200·7	137·3	68·4	3·3
1901	6	758	485	2·9	178·7	114·3	63·9	·7
1902	11	826	579	5·0	191·2	134·0	70·0	1·3
1903	15	533	130	6·8	121·1	29·5	24·3	2·8
1904	1	554	239	1·7	123·6	53·3	43·1	·7
1905	36	1117	739	15·8	4·9	162·0	66·1	3·2
1906	52	2301	1171	22·4	495·9	317·0	63·9	2·2

PART II.

ZYMOTIC DISEASES.

SMALLPOX.

Only one case of this disease occurred during the year, the patient being a woman, residing in Aylestone Street. The source of infection was not discovered. With the exception of conjunctivitis, which was eventually cured, the patient made a good recovery. No spread of the disease occurred.

SMALLPOX AND VACCINATION.

On this ever debatable subject there is little to add to what has been written in previous reports. As regards the question of compulsion I have seen no reason to modify the views previously expressed.

It would appear, indeed, that even in strong pro-vaccinist circles it is coming to be realised that the effect, from a public health point of view, of young children remaining unvaccinated is not quite so disastrous as was formerly believed. It is probable that the experience of Leicester and of other centres of anti-vaccination during the last epidemic has helped to bring about this more moderate attitude.

A notable utterance in this connection was contained in a letter to *The Times* (April 25th, 1906) over the signatures of Mrs. Garrett Anderson, M.D. (Hon. Sec. Imperial Vaccination League), and the Dean of Gloucester and Dr. Bond (President and Hon. Sec. of the Jenner Society). They stated that there was "a growing opinion that in consequence of altered social conditions and improved sanitary administration it is not absolutely necessary to have infants of a few months old vaccinated except in the presence of epidemic Smallpox," and they therefore advocated the postponement of vaccination until school age. Such a suggestion would have been regarded as rank heresy only a few years ago!

Another view which appears to be gaining ground is one expressed by the *British Medical Journal*, viz., that " the present position of vaccination in its legislative aspect is absurd and illogical."

The treatment hitherto meted out to the " conscientious objector " in many parts of the country is a glaring instance of the truth of this. Parliament, when it passed the Act of 1898, clearly intended the *bona fide* objector to vaccination to have relief from compulsion, yet how often has that relief been refused in the most unjustifiable manner ! The attitude of many magistrates on this question has shown what exaggerated views exist in many high quarters as to the importance of vaccination from a public health point of view. Some magistrates apparently still cling to the notion once held (and urged, it is true, when vaccination was first made compulsory) that an unvaccinated person acts as a sort of *nidus* in which the infection of Smallpox will germinate and multiply and then spread to the vaccinated community around.

My absolute conviction as to the complete, though temporary, protection conferred by vaccination on the individual is sufficiently well-known to enable me to write more freely than might otherwise be the case.

There is good reason to hope that the existing unsatisfactory state of the law is at length about to be remedied. As regards the compulsory vaccination of teachers in public elementary schools, it is true that this has now been left to local option, but the insistence upon it for so long after compulsory vaccination amongst the scholars had been virtually abandoned, was another instance of exaggerated belief in the power of vaccination.

As Dr. Bond (whose fidelity to the cause of vaccination is above suspicion) well puts it—" In order to justify this restriction two preliminaries are necessary ; one is to show that it is calculated to prevent the diffusion of smallpox, the second is to show that even if it be so it is expedient to adopt it on general grounds. The futility of attempting to prevent an outbreak of smallpox in a school by compelling the teacher to be vaccinated, when 50 per cent., or perhaps a larger proportion still of the pupils of this teacher are themselves allowed to enter the school unvaccinated, must surely be so obvious as not to need any enforcement. . . . . . What was both expedient and practicable fifty years ago has ceased to be so in face of the organised agitation against vaccination which has been steadily growing since that time, and which, I am bound to say, has been largely helped by the unwisdom of many who have thought they have been helping to promote a cause which they have by ill-judged coercion seriously damaged."

The "futility" Dr. Bond alludes to is all the more palpable when we reflect that it is not *recent* vaccination that is insisted upon, which would at least protect the teacher, but *primary* vaccination, it may be fifteen or more years old—just the kind of vaccination which, whilst it would no longer ensure against attack, would very possibly so modify the severity of the attack as to mask its real nature; and in this way it is quite conceivable it might actually encourage the introduction of the disease into a school! Were all the scholars vaccinated such an event would not be of much importance, but in schools such as those referred to by Dr. Bond or in any school in Leicester, it might easily be disastrous.

This is another illustration of the truth of the adage that half measures may be worse than useless. Compulsion appears to answer in Germany, but England is not Germany. In this country compulsion as regards vaccination has admittedly been a failure, and it seems probable that, to quote the words of Dr. Priestley, "the days of compulsion in any shape or form are rapidly passing away."

When compulsion has finally been abandoned there is good reason to hope that much of the present hostility to vaccination will vanish with it.

VACCINATION IN 1906.

The following figures show the number of vaccinations registered during each quarter of the year 1906.

	Public.	Private.	Total Vaccinations.	Exemptions Granted.
First Quarter	129	147	276	249
Second Quarter	93	164	254	269
Third Quarter	86	177	263	310
Fourth Quarter	93	187	280	252
	401	672	1073	1080

Thus out of the 5,865 children born only 1,073, or 18·3 per cent. were vaccinated.

SCARLET FEVER.

(Cases, 2,301; Deaths, 52.)

The most regrettable feature of the year under review was the widespread epidemic of Scarlet Fever which, beginning in 1905, continued all through 1906. The visitation was the severest for many years, the total number of cases being 2,301. They were distributed all over the Borough, practically no district being exempt. The worst months of the year were September, October, and November, the maximum being reached early in October, when, in one week ending October 6th, the number of cases reported was no less than 96.

Fortunately the type of the disease was mild, the case-mortality being only 2·2 per cent.

In the following Table the figures are given for previous epidemic years, and in Table XXIII will be found particulars as regards this disease for each year since 1877

SCARLET FEVER, EPIDEMIC YEARS.

Year.	No. of Cases.	No. of Deaths.	Case-mortality per cent.	Attack-rate per 1000 population.	Mortality per 1000 population.	Per cent submitted to Hospital.
1885	1816	113	6·2	13·3	·82	49·5
1892	1331	41	3·0	7·3	·22	55·0
1893	2308	81	3·5	12·5	·44	none
1896	2110	48	2·2	10·8	·24	47·7
1897	1645	73	4·4	8·3	·36	63·7
1899	1247	42	3·3	6·1	·20	69·4
1905	1117	36	3·2	4·9	15	66·1
1906	**2301**	**52**	**2·2**	**9·0**	**22**	...

Below are shown the number of cases occurring each month :—

1906.

Month.		No. of Cases.	Month.		No. of Cases.
January	..	174	July	..	151
February	..	128	August	..	152
March	..	138	September	..	208
April	..	191	October	..	318
May	..	186	November	..	289
June	..	186	December	..	180

INFLUENCE OF SCHOOL ATTENDANCE.

The great majority of the patients, as is usually the case with this disease, were school children. It must not be assumed from this that school attendance was specially to blame for the spread of the disease; indeed, considering the necessarily close contact with large numbers of other children in school, there was much less evidence of infection at school than might have been anticipated. A small outbreak occurred in March in connection with Shaftesbury Road Schools, some 20 cases being reported within ten days amongst scholars attending this school; and a certain amount of "clustering," *i.e.*, the occurrence of several cases in close succession, occurred also with several other schools. In some instances, these could be traced to children who had slight attacks of the disease without the parents being aware of the true nature of the complaint, the children having been allowed to return to school after a week or ten days' absence. Several of such cases were only brought to light by the teacher finding the child's hands to be "skinning." In this connection it is only right to acknowledge the care exercised by the teachers in the various schools in looking out for possible cases of scarlet fever, and other infectious diseases. They have undoubtedly done a great deal in this way to prevent the spread of infection. On the other hand, it is possible that in some cases there was a little over-zealousness on the part of the school attendance officers to keep up the percentage of attendances, at the risk of pressing back to school children who on health grounds would have been better away; but since attention was called to the matter this has been altered.

Taking the cases occurring throughout the whole year, the schools having the largest number of cases amongst their scholars were as follows:—

Catherine Street School	74	cases.
Shaftesbury Road School	67	,,
Hazel Street School	51	,,
Mantle Road School	51	,,
Ellis Avenue School	46	,,
King Richard's Road School	45	,,
Medway Street School	44	,,
Elbow Lane School	42	,,
Harrison Road School	40	,,

Narborough Road School	39 cases.
Melbourne Road School	38 ,,
Moat Road School	38 ,,
St. Margaret's School	38 ,,
Ingle Street School	36 ,,
Green Lane Road School	35 ,,
Bridge Road School	34 ,,
Abbey Park Road School	33 ,,
Charnwood Street School	27 ,,
Belper Street School	23 ,,
Christow Street School	23 ,,
Granby Road School	23 ,,
Avenue Road School	21 ,,
Clyde Street School	21 ,,
Mellor Street School	20 ,,

HOW INFECTION WAS SPREAD.

There is no question that the mild type of the disease conduced to its spread. Many of the cases which occurred were of the most trifling character, the patients never being seriously ill, and the rash being so evanescent as sometimes to escape notice altogether. In such cases it is easy to understand how the true nature of the disease would escape detection, and, no precautions being taken, spread of infection was of course greatly facilitated. Even when the nature of the complaint was known, it was more difficult to ensure adequate precautions being taken than if the type had been more serious. A similar experience was noted, it will be remembered, in connection with the last smallpox epidemic, which was also of a very mild character.

In one case a mother was cautioned by the Sanitary Committee for carelessness in not taking proper precautions, and in another more flagrant case, the culprit was prosecuted. This was a young man who, after being told by a doctor whom he consulted that he was suffering from scarlet fever, left his lodgings in Leicester and travelled by train to Nottingham, where his home was. He was there found by the Nottingham authorities (owing to information sent from Leicester) and removed to the Nottingham Isolation Hospital. He was subsequently summoned by your Committee for infringing Section 126 of the Public Health Act, and was convicted. As the Corporation did not press for a penalty, however, he was let off with a caution.

The spread of infection in the case of scarlet fever is believed to be almost entirely by personal infection from case to case. Occasionally the infection is carried through the medium of milk, and wherever a case occurred in a milk shop, or in the family of anyone engaged in the milk trade, special precautions were immediately taken. A close watch was kept in this way throughout the year, and there is no reason to think that any infection was carried through milk. It is quite possible, however, that there may be some other obscure and hitherto undiscovered method by which the disease may spread. It has been suggested, indeed, that the organism of scarlet fever may, under certain circumstances, be capable of leading an independent existence outside the human body. If this should prove to be the case it would help to explain why this disease has hitherto so largely baffled us in our attempts to suppress it.

HOSPITAL ISOLATION.

The number of patients with scarlet fever removed to hospital was 1,471. This is the largest number ever admitted in one year, and it threw a very heavy strain upon the resources of the institution. The cases thus removed amounted to 64 per cent. of the cases occurring. Further particulars under this head will be found in the Report of the Isolation Hospital.

SECONDARY CASES.

The number of cases occurring in households in which a previous case had been notified (within six months) was 561, or 24·3 per cent.

"RETURN CASES."

A proof of the extreme infectivity of the disease during the past year is found in the prolonged periods for which many of the cases continued to be infectious. This was evidenced by the exceptionally large proportion of "return cases," *i.e.*, cases occurring in a house after the return home of a patient from hospital. It does not follow, of course, that all such cases should be regarded as having been infected by the home-coming patient—a certain though probably small proportion being, no doubt, merely coincidences—but it is now generally admitted that, in the majority of these cases, infection is so carried. Unfortunately at present we do not know how this feature of hospital isolation is to be prevented. The practice of keeping patients in hospitals for long periods has been repeatedly tried, and has proved a failure. In some hospitals all scarlet fever patients have been detained for at least eight weeks, whilst severe cases have been kept for twelve or even sixteen weeks, but without preventing these "return" cases. On the other hand, the view is now gaining ground that to unduly prolong the stay of patients in hospital is quite a mistake, for not only does this greatly increase the cost of hospital isolation, but it fails to achieve the object aimed at; indeed, as some think, it may even tend to encourage the very evil it is sought to prevent.

There are strong grounds for believing that a crowded condition of the wards has a specially injurious effect in this respect, and the practice of prolonging the stay in hospital tends, of course, in the presence of an epidemic, to produce over-crowding. During the past year, owing to the very large number of cases to be dealt with, the accommodation at the hospital was undoubtedly taxed to its fullest extent, and the number of patients in each ward was greater than usual. It is possible, therefore, that this was one of the factors in the increased incidence of "return case" infection. The average stay in hospital, however, was about the same as usual, and the process of disinfection the same.

The total number of instances in which the return of a patient from hospital was followed during the succeeding six weeks by a fresh outbreak of the disease in the house was 104, or 7·5 per cent. of the patients discharged.

The interval which elapsed between the return home from hospital of the first case and the onset of the next varied considerably. It may be classified as follows:—

Return Cases: Interval.

Under 1 week	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6
38	33	14	6	6	4

Total 101. (In three other cases the particulars are not complete.)

It appears, therefore, that the great majority of the cases occur within the first two weeks after the return home, and that then they rapidly decline. It may seem remarkable that so long an interval should elapse, assuming that the infection is really carried from hospital; but it is now believed that a child may be apparently quite free from infection at the time it actually leaves the hospital, yet subsequently, especially if it develops a discharge from the nose or ears, it is possible for it to again become infectious. I have frequently known instances where this has seemed to be the case. Again, if the degree of infectivity is only slight, and the child from hospital is not brought very intimately into contact with the other children in the house, it is easy to understand how they may at first escape.

DURATION OF THE SUPPOSED INFECTING CASES.

In considering the length of time the alleged infecting case was detained in hospital, it is necessary to include any time the patient was ill at home before removal to hospital. We therefore count from the onset of the illness to the date of discharge from hospital and speak of the period as the "period of isolation" of the case.

We then get as follows :—

Period of Isolation of Alleged Infecting Case.

Weeks ...	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9
Cases ...	17	33	21	12	11
Weeks ..	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14
Cases ...	1	6	2	1	1

If to the period of isolation we add the "interval" which elapsed after the return home of the infecting case before the onset of the "return case" and call this the "duration of infection" of the infecting case, we obtain the following :—

Duration of Infection of Infecting Case.

Weeks ...	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	
Cases ...	6	22	25	11	10	7	
11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	18	
9	4	2	0	1	0	1	

(In six cases the details are incomplete.)

AVERAGE DETENTION IN HOSPITAL OF SCARLET FEVER CASES.

The average stay in hospital of scarlet fever patients during the year was 42·8 days, as compared with 40·7 in 1905, and 43·0 in 1904.

TYPHOID FEVER.

(Cases, 67 ; Deaths, 14.)

The record of the Borough as regards typhoid fever continues to be very favourable. A localised outbreak occurred towards the close of the year in a house in Victoria Road East. The first case was a woman, the mother of the family, who after being ill for about a fortnight was removed to hospital. She was followed by all the rest of the household except her husband, who was the only one not attacked out of eight. The drains were found defective and the smoke test revealed a slight escape into the scullery. It is possible that this acted as a predisposing cause, but probably the disease actually spread by direct infection. There is no question that the supposition at one time entertained that typhoid fever does not spread by direct infection is quite erroneous ; indeed, at times, under conditions not properly understood, the disease would appear to be highly infectious. We had striking evidence of this at the Isolation Hospital early in the year, when a number of the staff (five nurses and a ward-maid) engaged in the Typhoid Fever Block were attacked by the disease. Further reference to the outbreak will be found in the Report of the Isolation Hospital.

DIPHTHERIA.

The number of cases of diphtheria notified was 315, and the number of deaths 27, equal to a case-mortality of 8·5. A reference to the figures below shows that, following the severe epidemic of 1899–1901, this disease fell to a minimum as regards both prevalence and fatality in 1904, there being in that year only 97 cases, with 6 deaths. In the last two years the number of cases has increased and there has also been a slight increase in fatality, though happily not approaching the high rate which was the rule prior to 1904.

The number of cases removed to hospital was 166 (or 52·7 per cent.) of which 16 proved fatal. With this disease there is not the same desire on the part of the friends as in the case of scarlet fever to get patients removed to hospital, this no doubt being accounted for by the less infectious nature of the disease. In consequence of this, mild cases, especially in adults, are often allowed to remain at home, whilst those which are removed to hospital include most of the bad cases and especially those likely to require operation. We make a practice with diphtheria not to refuse any case calling for operation, or likely to do, no matter how ill the patient may be, and owing to this, the fatality of cases treated in hospital appears higher than would otherwise be the case.

DIPHTHERIA IN LEICESTER.

Year.	Cases.	Deaths.	Fatality (per cent.)
1895	75	36	48·0
1896	170	53	31·1
1897	229	73	31·9
1898	218	63	28·9
1899	892	222	24·8
1900	1452	316	21·7
1901	1034	155	14·9
1902	320	29	9·0
1903	211	28	13·2
1904	97	6	6·1
1905	173	11	6·3
1906	**315**	**27**	**8·5**

PUERPERAL FEVER.

The number of cases of puerperal fever was 10, four of which proved fatal. There is some difference of opinion amongst medical men as to what exactly constitutes "puerperal fever," there being no one symptom which can be regarded as pathognomonic. In some cases, of course, there is little difficulty, but in many of the slighter cases there is often room for legitimate doubt as to whether the case should be notified or not.

All cases of puerperal fever occurring in the practice of midwives are investigated, and the midwife interviewed by the Medical Officer of Health, who gives instructions as to disinfection, and, when necessary, temporary abstention from practice. In no instance did a second case follow in the same midwife's practice. Only two fatal cases of puerperal fever were attended by midwives, which is all the more satisfactory as the condition under which the class of patients attended by midwives are confined is often far from favourable.

The following figures show the number of cases and deaths in recent years :—

Year.	Cases.	Deaths.	Case-Mortality.
1897	20	7	35·0
1898	11	2	18·1
1899	18	6	33·3
1900	26	8	30·7
1901	12	4	33·3
1902	15	5	33·3
1903	11	3	27·2
1904	16	5	31·2
1905	20	7	35·0
1906	**10**	**4**	**40·0**

ERYSIPELAS.

The number of cases of erysipelas reported was 158, and the number of deaths was two. This is the lowest figure, as regards both cases and deaths, for many years.

In my last Annual Report I quoted the opinion of previous Medical Officers of Health for the Borough as to the inutility of including this disease amongst the notifiable diseases, and at the Conference held in May, between the Sanitary Committee and the Medical Practitioners of the Borough, to consider the question of the compulsory notification of phthisis, the question of discontinuing notification of erysipelas was also brought forward. The prevailing opinion was that no reai benefit resulted from notification. A resolution was passed in favour of discontinuing notification and a similar resolution was forwarded by the Town Council to the Local Government Board, who replied that the suggestion had been noted for consideration when opportunity for dealing with the matter should arise.

MEASLES AND WHOOPING COUGH.

Measles caused 80 deaths during the year, 73 of these being in children under five years. Whooping Cough caused no less than 112 deaths, 108 of them being in children under five years.

The number of deaths during the past few years have been as follows:—

	Measles.	Whooping Cough.
1902	73	67
1903	74	36
1904	32	89
1905	53	50
1906	80	112

The mortality from these two diseases therefore was the heaviest for some years.

The following hand-bill relating to measles is now being distributed by the School Attendance Officers whenever they come across the disease.

BOROUGH OF LEICESTER.

MEASLES.

Measles is a *very serious disease.*

It causes more deaths than smallpox, scarlet fever and typhoid fever put together.

Most of the deaths are in young children under the age of three or four years.

There is a special reason, therefore, in striving to protect children from it during the early years of life.

Symptoms.

These at first suggest an ordinary feverish cold—sneezing, coughing, running at eyes and nose, etc.; occasionally vomiting, diarrhœa or shivering. The *rash* usually does not appear till third or fourth day, is red and spotty in character, and is present on face and neck as well as on body and limbs.

The disease *is very infectious* from the very beginning, so if measles is suspected the case should be *isolated at once* in a room by itself. When this is not possible, at least keep it away from the younger children who have not had the disease.

Nursing.

Keep child warm in bed; avoid exposure to draught; keep room at even temperature (about 60 degrees). Burn all discharges from mouth, nose or eyes. Feed on milk and slops.

Infection.

In slight cases children may appear well at end of ten days, but they must be treated as still infectious and not be allowed out until end of third week. At termination of case, *wash everything* that can be washed and thoroughly air everything else.

School Attendance.

Children in Standard III and upwards *who have already had the disease* need not be stopped from school. All others must be kept away until three weeks after the beginning of the last case.

(Signed) MEDICAL OFFICER OF HEALTH.

Sanitary Office,
Town Hall.

DIARRHŒA.

The summer of 1906 was exceptionally hot and dry. The rainfall during the first six months of the year amounted to less than 11 inches; in July only 0·3 inches fell, whilst all through August and the first fortnight in September, there was no rain at all. Under these circumstances it was only to be expected that the annual epidemic of infantile diarrhœa would be more severe than in the wet, cool summers of 1902–3. There is, indeed, some cause for satisfaction that the visitation was not more serious than it was, and it may, I think, be regarded as evidence that the ravages of this scourge are being gradually lessened. The total number of deaths ascribed to this disease was 258, 223 of which were in infants under one year old.

The number of deaths in previous years are shown below :—

DEATHS FROM DIARRHŒA, 1884-1906

Year.	No. of Deaths.	Average Annual No. of Deaths.	Average Annual Mortality per 1000 Population.	Year.	No. of Deaths.	Average Annual No. of Deaths.	Average Annual Mortality per 1000 Population.
1884	344	236	1·68	1894	176	300	1·55
1885	186			1895	369		
1886	256			1896	272		
1887	247			1897	360		
1888	148			1898	323		
1889	121	234	1·30	1899	292	212	1·06
1890	218			1900	286		
1891	204			1901	224		
1892	214			1902	137		
1893	399			1903	133		
				1904	275		1·23
				1905	211		·92
				1906	**258**		**1·11**

The epidemic began early in August and continued until the beginning of October, lasting ten weeks. It reached its maximum in the second week in September, immediately after the almost tropical heat experienced in the first week, when the temperature on several days was nearly 90° in the shade.

During the time the epidemic prevailed a great many infants attacked by the disease were brought by their parents to the newly started Corporation Infants' Milk Depot, in the hope that they might thereby be saved. It is very desirable that it should be known that an infants' milk depot is a preventive and not a curative institution against diarrhœa, and that to be effective it is necessary that infants should be brought to the depot *before* they are attacked by the complaint.

PHTHISIS.

The subject of phthisis was dealt with at some length in the Annual Report for the year 1905. During 1906 the number of deaths from this scourge was no less than 339, which is higher than in any year except 1904. This will be seen by a reference to the second column of Table XX. The rate per 1,000 population was 1·46. The deaths from all forms of tuberculosis numbered 410, equal to a rate of 1.76 per 1,000 population.

Comparison with former years.

Average Mortality from all forms of Tuberculosis.

Quinquennial Period.			Average Annual Mortality per thousand living.
1881–1885	..	..	1·81
1886–1890	..	..	1·77
1891–1895	..	..	1·72
1896–1900	..	..	1·66
1901–1905	..	..	1·72
1906	..		1·76

Confining our attention to the 339 deaths from phthisis, or tubercle of the lung, we find that 201 were in males, and 138 in females. Their ages and occupations are shown in Table IV.

THE FAMILY HISTORY OF PERSONS SUFFERING FROM PHTHISIS.

For several years, since, indeed, we began the notification and investigation of cases of phthisis, particulars have been given here as to the *family history* of persons suffering from consumption.

During the past year 160 cases have been investigated (by the Sanitary Inspectress) and from the information thereby obtained the following particulars have been summarised, showing the number of instances where some other member or members of the family have also suffered from the disease.

Relationship	No. of Instances.
(1) Father or mother (in 18 of these a brother or sister also affected, but these are not included in 2)	27
(2) Brother or sister (in 9 cases more than one) ..	27
(3) Uncle or aunt (no nearer relative)	15
(4) Husband or wife	2
(5) Son or daughter	2
(6) Grandparents (no nearer relative)	4
(7) No history of consumption in family ..	83
	160

The small number of instances in which a son or daughter are returned as affected is, of course, accounted for by the fact that phthisis does not often appear before adolescence or after early middle age, so that consumptive parents happily rarely live to see their children attacked. The small number of instances under (4), husband or wife, cannot be thus explained, and points strongly against the theory that *personal infection*, apart from *hereditary predisposition*, plays much part in the spread of the disease. On the other hand, the comparatively large number of cases where parents or brothers and sisters have also suffered from the disease is very striking. A few individual cases point still more distinctly to the large part played by hereditary predisposition. Thus, the following are the relatives of patients who had suffered, or are suffering, from consumption :—

Parent and two sisters.
Parent, uncle and aunt.
Parent, grandparent, uncle and aunt.
Parent, brother and sister.
Parent and two sisters.
Parent, brother and sister.
Uncle, two aunts, and grandmother.
Uncle and three aunts.

Sister and three brothers.
Brother and two sisters.
Two sisters.
Brother, two aunts, and grandfather.
Brother and sister (three instances of this).

The above are the members of the family who were affected *in addition* to the person who was the subject of investigation.

At the same time, it is only right to bear in mind that in 83 cases, or over 50 per cent., no previous instance of the disease having appeared in the family was adduced.

THE NOTIFICATION OF PHTHISIS.

The system of voluntary notification of phthisis, initiated in October, 1902, continues to work satisfactorily. The following figures give the number of cases notified each year together with the number of deaths registered :—

Year.	Cases Notified.	Deaths Registered.
1903	156	266
1904	182	353
1905	225	288
1906	215	339

The system of notification is quite voluntary, it being optional on the part of the medical man whether he notifies or not. If he chooses to notify he is paid the same fee as under the Notification Act, viz., 2s. 6d. for cases in private practice, and 1s. for cases occurring in public institutions. A separate notification form is provided, which runs as follows :—

"I hereby certify that in my opinion the person hereinafter named is suffering from phthisis, with tuberculous expectoration." Then come blanks for name, address, and age of patient, whilst a note at the foot states that "This certificate is a voluntary one. The Sanitary Committee desire notification to be made only when in the opinion of the medical practitioner public good can be achieved by such notification. Cases should not be notified which have already been notified by another practitioner, unless there has been a change of address meanwhile. The notification of moribund cases is not desired."

The system has been found to work quite satisfactorily and no difficulties have been experienced. It is evident from the figures given above that a very large proportion of the total cases are notified. Nevertheless, there is a strong feeling that if notification is of value it ought not to be a matter of personal option or of invidious distinctions, but that the community ought to have the right of requiring notification in every case.

COMPULSORY NOTIFICATION.

The question having been raised, a Conference, to which all members of the medical profession in Leicester were invited, was convened by your Committee to consider it. The meeting was held in the Council Chamber, on May 17th, 1906, and about thirty medical men were present. Alderman Windley presided. A resolution was passed in favour of compulsory notification on the lines of the system adopted in Sheffield, under Section 45 of the Sheffield Corporation Act, 1903. Subsequently a resolution was sent by the Town Council to the Local Government Board, asking them to take steps for giving power to Local Authorities to require compulsory notification. The Local Government Board, however, replied that in their view pulmonary tuberculosis was not a disease to which compulsory notification under the Infectious Diseases (Notification) Act, 1889, could with advantage be applied. They feared that the inclusion of pulmonary tuberculosis among diseases compulsorily notifiable might tend to the adoption of measures which, however appropriate in the case of acute infectious diseases, such as fevers, would be unnecessary and unreasonable in that of pulmonary tuberculosis.

The Board, however, fully recognised the importance of local authorities concerning themselves particularly with the existence and progress of the disease in their districts, and they approved the practice which had been adopted by many local authorities (including Leicester) of arranging with the local medical practitioners for the voluntary notification to the Medical Officer of Health of cases of tuberculosis occurring in their respective practices.

The Board in their communication pointed out that contrary to the general belief the prevalence of pulmonary tuberculosis has for many years past been steadily decreasing in England and Wales, and in this connection referred to the Annual Reports of the Registrar General.

The Board further referred to the fact that a Royal Commission was at present considering questions of the highest importance in regard to tuberculosis in man, and stated that pending the issue of the Report of the Commission the Board were unable to entertain proposals of local authorities to extend the operations of the Infectious Diseases (Notification) Act, 1889, to pulmonary tuberculosis.

HOSPITAL TREATMENT OF CONSUMPTIVES.

The number of applications from consumptives received during 1906 for admission to the Borough Hospital was 156, and there were also four applications for readmission. A great many of these, however, as is usually the case, were quite unsuitable for admission the disease being too far advanced.

The number actually admitted to hospital was 69, as compared with 156 in 1905, and 120 in 1904. The reason for this reduction in the number of patients admitted was two-fold:

(1) Owing to the scarlet fever epidemic it was impossible to spare the wards previously utilised for female consumptives, with the result that only three female consumptives were admitted in 1906.*

(2) Patients have been rather more carefully selected, and allowed to remain under treatment longer. Thus the average stay in hospital during 1906 was eight weeks, as against only five weeks in the previous year. As the result of the experience gained since we have been admitting consumptives to Gilroes (and the total number who have passed through our hands now amounts to just over 400) the conclusion has been arrived at that it is wiser to allow patients who are continuing to make progress to remain for a longer period than was at first adopted. There are two objects which can be aimed at in Sanatorium treatment—(*a*) To teach the patient lessons in hygiene, cleanliness, and proper method of living; and (*b*) If possible, to permanently arrest the disease, *i.e.*, to cure the patient and enable him to return to work. If only the first of these objects is sought, it is obviously better to admit as many cases as possible, keeping each for a comparatively short period only. On the other hand, if the second object is the one sought for, then it is better to admit only a few cases and keep them much longer. During the past year we have adopted a middle course, which, on the whole, I think, is best. Cases have been admitted in the first

* Early in 1907 it was found possible to again admit female patients.

instance for one month only ; at the end of that time, if the patient has made marked progress towards recovery, and was anxious to remain, he was allowed to do so on payment of 10s. per week towards the cost of maintenance. This charge does not cover the whole cost, which amounts to about 15s. per week, the chief item being the cost of the food, which in the case of consumptives is rather heavy, patients having to be fed well. When the second month was concluded, if a patient was still progressing, he was often allowed to remain for a third month without charge.

The number of patients during 1906 who paid to remain was 24, the amount received being £55, a few patients paying for more than four weeks' stay. The money is paid in advance, direct to the Borough Treasurer, at the Town Hall, a statement of the amount due, and name and address of the person who has guaranteed the payment, being forwarded to the Treasurer by the Medical Officer at the Hospital. In a few cases payment for patients has been made by the Charity Organisation Society and more recently by the Hospital Saturday Fund. The Foresters' Friendly Society have decided in suitable cases to assist their members in the same way.

At one time it was our practice to allow patients to remain for two months free, and then charge them for the third month, but the objection to this was that after two months patients often get a little restless, and think they are well enough to return to work, and they are then less inclined to pay than they are in the second month.

It is necessary to point out that even with the longer period of time which patients have remained at the hospital during the past year, the duration of treatment is still much below what it ought to be, if the curing of patients is the principal object. It may safely be said that, as a rule, even with very early cases, three months is the minimum period required for a permanent arrest of the disease, and very often it may be six months or longer. If the treatment is left off too soon the danger of a relapse is, as we should expect, greatly increased. No patient ought to discontinue the treatment until some time after all physical signs of the disease have apparently disappeared, as there is always a danger of some slight *foci* remaining undetected. It is also most desirable that patients after leaving hospital should not return to factory life, but should take up some outdoor occupation.

Lastly, there is a question of getting cases early enough, *i.e.*, whilst still in the incipient stages of the disease. It cannot be too often insisted upon that the sooner cases are placed under treatment, after they have been attacked by the disease, the greater is their chance of recovery, and the shorter the time required for a cure. Unfortunately, the onset of the disease is so insidious that too often patients do not seek medical advice until it has already made considerable headway. Sometimes, too, patients or their friends would appear to put off seeking advice as long as possible, because they fear to learn the truth. Recently, a mother brought her daughter to me to apply for admission to hospital, and I found that although there had been symptons of the disease for six months, the mother had only taken her to a doctor a few days before. Yet she had previously lost three other children from consumption. Of the patients notified during the past two years the average length of time that they had been suffering, prior to their being brought to our notice, was 16 months. Taking the cases actually admitted to hospital last year, and which, as has been said, were selected with more care than previously, the average duration of the disease before applying for admission was seven months. It is desirable that we should get them within the first three or four months.

The results as regards the cases admitted in 1906 may be briefly tabulated as follows :—

59 patients improved, the average gain in weight being 9 lb.
2 patients remained stationary.
3 got worse, losing weight.
1 died.
4 patients remained in hospital for only short periods (less than 15 days).

Turning to individual cases, the following are brief particulars of twelve of the more favourable cases during the year 1906.

(1) Horace N——, age 20, single, early case, several attacks of hemorrhage. Remained at Gilroes 4 months, gained a stone in weight. He went to another sanatorium for another 3 months to complete cure. Has since done 7 months' outdoor work, and appears to be in splendid health.

(2) Frank H——, age 23, single, ill 12 months, hemorrhage 6 months ago. Right apex affected. Put on 13 lb. during 3 months' stay. Left in May apparently cured. Is now a conductor on Corporation Trams and had no return whatever of the disease.

(3) Albert G——, age 26, single, shoehand, very early case, only ill 1 month. Right apex affected. A sister died from phthisis. Put on 7½ lbs. in weight during 30 days' stay. Left in March, having gained admission to another sanatorium. Is now in Canada, and writes that he is in good health.

(4) Harry J——, age 27, married, four children, gas labourer, very early case. Remained at Gilroes 2 months, gaining 16 lbs. in weight. Left in April, 1906. Is now a tram conductor, and keeping well. He writes (January, 1907): "I have just passed medical exam. as motor man. Am very glad to give this good account of myself, as I am strong and well, and I cannot speak too highly of the treatment I received."

(5) Joseph D——, age 42, single, sawyer, early case, only ill 1 month. Two sisters died of phthisis. Right lung affected. Did well, put on 21 lbs. in 3 months. Left hospital in June, 1906. Has been back at work since, and is keeping fairly well.

(6) Arthur L——, age 23, single, shoehand, hemorrhage three years ago; went to a home at Southport, and apparently got cured. Has been well since until a fortnight before admission, when he had a fresh hemorrhage. Gained 9½ lbs. in 2 months. Left in April, 1906, and has since been at work in a coal depot. Was seen ten months later and was still keeping well.

(7) Harry R——, 34 years, married, finisher, ill 4 months; suffers from "shoe-maker's chest"; both lungs affected. Three brothers died from phthisis. Stayed 2 months, putting on 14½ lbs. Left in July, 1906, and has since done 6 months' work in factory, working from 8 a.m. to 7 p.m. Health keeping good, except for slight cough. He writes:—"I am still complying with the advice you gave to me in regard to the fresh air treatment, and I am thankful to say that I am benefited by same."

(8) John M——, age 27, married, shoehand; early case. Two brothers suffered from phthisis. Remained 4 weeks, gaining 6 lbs. Has since been at work 6 months, and is keeping well.

(9) George G——, age 21, single, shoe finisher; very slight case, ill 3 months. Made good progress, and at end of a month gained admission to Northwood Sanatorium, where he remained 2 months. He then passed medical examination for Royal Navy, and when last seen appeared in splendid health.

(10) Ernest A——, age 26, married, shoehand; mother, two brothers, and a sister all died from phthisis. Right apex affected. Improved greatly, putting on 11 lbs. in 2 months. Left in August, apparently cured. Six months later writes to say he feels as well as he has ever done in his life. Never gets tired as he used to do. He tried to get work outside, but failed, so has gone back to the factory. Has been back at work 5 months. Is very grateful for the treatment received.

(11) John I——, age 36, married, two children, basket maker; ill for 9 months on and off. Mother and brother died from phthisis, and another brother is also suffering. Early case, improved considerably. Has gone to South Africa.

(12) Thos. F——, age 41, married, four children, shoehand; ill 8 months, from work 6 months. Put on 28 lbs. during 5 months' stay. Left in October practically cured. Has returned to work in factory, and is still keeping well.

The time that has elapsed since these patients left hospital is not very long, but we have particulars of a number of cases who were under treatment in 1905, 1904, and even in 1903, and who are still at work. It is only right, however, to point out that the majority of the patients treated in those years are now either dead or in an advanced stage of the disease.

The following are particulars of some of the more successful cases in previous years:—

(1) Alice P——, box hand. Was at Gilroes for a month in 1903. In February, 1907, she writes that she has been at work ever since she left and that she has had no return of the disease.

(2) John T. A——, age 26, clicker. Father died of phthisis, and a sister is suffering from caries of spine. Was at Gilroes for 4 weeks in October, 1903, and put on 5½ lbs. in weight. In February, 1907, he writes to say that his health is good, and he has been at work ever since, at outdoor agencies. Is grateful for what has been done for him.

(3) Eva S——, age 18, chronic case. Was at Gilroes for 3 months, leaving in January, 1904. Improved greatly, putting on a stone in weight. In February, 1907, she writes to say that she has been at work in fancy-yarn warehouse ever since she left hospital, that her health is improving, that the former symptoms of consumption are gradually disappearing, that her appetite is good, and that she sleeps with window wide open. She believes her stay at Gilroes was very beneficial.

(4) Alice C——, age 21, incipient case. Was at Gilroes for 3 months, leaving March, 1904. Gained 16 lbs. Has been able to do about 2 years' work as machinist since she left. Still suffers from "weakness."

(5) Harriet S——, age 13. Mother, three aunts, and a grandfather all died from phthisis. Went to Gilroes for 2 months at end of 1903. She has now done 2½ years as a hosiery hand since she left. She writes, February, 1907, "My stay at Gilroes has no doubt built me up a great deal, as my general health has greatly improved since my discharge, and I am greatly indebted for the treatment received."

(6) Samuel T——, early case. Father, sister, and brother all suffered from phthisis; admitted to Gilroes, December, 1903; remained 1 month. Has been able to do 15 months' work as plumber and is still at work, but still suffering from the disease.

(7) Arthur G——, age 31, hosiery hand, early case. Was under treatment at Gilroes for 2 months early in 1904. Gained 9 lbs. Has been back at work ever since he left nearly 3 years ago. He writes:—"I cannot speak too highly of the benefit I received at the Gilroes and I am still following the treatment as far as it lays in my power, and I also advise others as I come in contact with, hoping others would do the same. I am a total abstainer, and I only hope that by God's help I have mastered it (the disease) for the sake of my children. Thanking you very much."

(8) Florence P——, age 20, right apex consolidated, moist sounds all over right lung. Was at Gilroes for 5 weeks, leaving in August, 1904. Great improvement, physical signs diminished, increased 6 lbs. in weight. Writes to say she is much better and has done 2 years' shoe work at home.

(9) Emily R——, age 26, domestic servant. Admitted to Gilroes in July, 1904, with consolidation of upper two-thirds of right lung. Remained for 4 weeks, during which time she put on 1½ lbs. in weight, and then continued the treatment for some months elsewhere. In February, 1907, she writes that she is well and at work. Has been "altogether different" from what she was before.

(10) Eliz. H——, age 20, hosiery hand. Father and three sisters have died from phthisis. At Gilroes for 4 weeks in October, 1904. She now writes that she is not over strong, but has been able to work for about 2 years since leaving.

(11) Michael M. T——, age 18, shoehand. Was at Gilroes for 4 weeks in October, 1904, gaining 12 lbs. in weight. Writes that his health is good, and that he has done 2 years' work.

(12) Mary A. L——, age 30. A sister is also suffering from phthisis. Has had severe hemorrhage; left apex affected. Was at Gilroes for 4 months, leaving in December, 1904. Gained 11 lbs. in weight. In February, 1907, she writes to say that her health is fairly good, and that she has been back at work as a hosiery machinist ever since.

PART III.

GENERAL.

ADMINISTRATION OF FACTORY AND WORKSHOPS ACT, 1901.

1. *Inspection.*—The number of visits paid during the year to factories and workshops was 757, in addition to 257 visits paid to *work-places* (other than out-workers' premises).

2. *Defects.*—The following defects were found:—

Want of Cleanliness	76
Want of Ventilation	20
Other Nuisances	230
Insufficient Sanitary Accommodation ..	39
Total	365

Notices were served and the great majority were complied with. There were no prosecutions.

3. *Home-work.*—The number of lists received from employers was as follows:—

	Twice in the Year.		Once in the Year.	
	Lists.	Outworkers.	Lists.	Outworkers.
Wearing Apparel (making)	108	2385	65	1361

The number of addresses of out-workers received from other Councils was 18.

The number of addresses of out-workers forwarded to other Councils was 665.

The number of inspections of out-workers' premises was 98.

The number of houses in which out-work was done and in which cases of infectious diseases occurred was 720. In all cases it was temporarily discontinued.

4. *Registered Workshops.*—The number of workshops on the Register is 808.

5. *Other Matters.*—

Cases notified by H.M. Inspector as remediable under the Public Health Act ..	49
Reports (of action taken) sent to H.M. Inspector	49
Underground Bakehouses in use at end of year	3

VENTILATION OF FACTORIES AND WORKSHOPS.

The Fresh Air Card referred to in last year's Report has continued to be issued, and many hundreds of them are now being exhibited in the various factories and workshops. Whilst almost everyone agrees in theory with the importance of fresh air, there is a great difference of opinion in practice as to how much fresh air ought to be tolerated. It is difficult to effectually change the air in a work-room occupied by many people as often as is necessary for health without producing some draught, and many people unfortunately are very sensitive to draughts. In some cases, no doubt, improved structural facilities for ventilation are needed; in others, the exercise of a little care and judgment is all that is necessary. In order to ventilate without draughts (we refer of course only to "natural" ventilation) it is desirable to admit the incoming cool air from as many different points as possible, and to direct it upwards so that it will not fall directly upon the heads of the occupants. It is also necessary for efficient ventilation that outlets as well as inlets be provided. Perhaps, however, the most important desideratum, and one which is too often entirely neglected, is that in every work-room where a number of hands are employed, there shall be some one person specially charged with the duty of attending to the ventilation. That which is anybody's business is nobody's business, and too often the question of ventilation is left to look after itself. What usually happens in such cases is that a few persons who object to fresh air close up every opening from which the least current of air can be felt, and these remain closed until in hot weather the air at length becomes so stifling that they have to be opened. With the first advent of cooler weather they are quietly closed up again, and remain closed once more. It is a fact that not infrequently the means of ventilation provided by the architect will remain disused for months, or even years at a time.

The truth is there is far too much indifference in the case of most people on this vital subject of ventilation. This indifference is common to almost all sorts and conditions of men and women. Not in theory, perhaps, but certainly in practice.

Health Committees discuss the question and agree as to the importance of ventilation, yet their own committee rooms may be notoriously badly ventilated. Editors write about it and deplore the evil, yet their own offices and printing rooms may be suffocating. As for our Churches, many of them are so hopelessly badly ventilated that people with weak lungs are well advised not to attend. Even medical men are but little better than the rest of the world. They attend conferences and preach about fresh air and the prevention of consumption, yet the rooms in which their meetings are held are often almost stifling. I have had to leave such meetings before now on account of the bad air.

I fear that until the "ventilation sentiment" of the public becomes very much stronger than it is at present—until people positively decline to breathe bad air, instead of preferring it, as some really seem to do at present—so long will the evils resulting from the breathing of bad air continue.

THE MIDWIVES ACT, 1902.

The number of registered midwives practising in the Borough is 42, an increase of 5 as compared with the previous year. Three of the new-comers were trained at the Leicester Maternity School, two having obtained scholarships from the Education Committee.

Of the existing midwives eleven are trained and hold one or other of the recognised certificates. Of the remainder, several may be regarded as satisfactory, being careful, cleanly and intelligent, but there are a few to whom this description could not accurately be applied. On the whole, however, I should say that the midwives in Leicester are above the average.

They have all been seen twice during the year, and in some cases more frequently, and their case-books and midwifery bags have been inspected. They are sending in their returns fairly satisfactorily. In addition to the notifications of still-births and the records of sending for medical help as required by the Act, they are, at our request, sending a daily notification of every labour attended by them. Stamped addressed forms are supplied to them for this purpose. In this way, much earlier intimation of births is obtained than would be possible from the Registrars of Births.

The number of cases of puerperal fever during the year was ten, and only four of these occurred in the practice of a midwife.

In no case was it necessary to formally suspend a midwife from practice, but in two of the cases the midwife at my request ceased to attend cases for a week. In the other two cases this was not considered necessary.

The number of confinements attended by registered midwives during 1906 was about 2,600, or 44 per cent. of the total births. There is a great difference between the number of confinements attended annually by different midwives. Thus eight midwives with the largest practices attended between them no less than 1,513 cases, whilst twelve others are scarcely practising at all.

The number of still-births notified was 85, and the number of intimations of sending for medical help was 32.

THE TRAINING OF MIDWIVES.

A small training school for midwives was started by the Leicester Provident Dispensary, two years ago, in connection with a Cottage Maternity Hospital containing four beds. The Town Council, through the Education Committee, give four scholarships of £25 each, and the County Council give six. The women to whom these are granted undertake to practise for at least two years in the town or county respectively. It was at first feared that in 1910, when no unregistered midwife will be allowed to practise, a serious shortage of midwives might occur. I do not anticipate, however, that there is any likelihood of this in Leicester, though the case may be different in country districts. The number of unregistered midwives in Leicester, so far as I have been able to ascertain, is only very small. They are mostly old women doing so little practice that they did not think it worth while to register, so that even when they have to discontinue practising it will not appreciably affect the town.

THE NOTIFICATION OF BIRTHS.

The importance of early notification of births to the sanitary authority is becoming generally recognised. The method of obtaining this in Leicester through the co-operation of the midwives has been mentioned above, and as an informal arrangement it is answering well. A Bill is in Parliament, however, under the provisions of which it will be incumbent upon the father, or, in his absence, upon any person in attendance upon the mother, to send notice of the birth to the Medical Officer of Health within forty-eight hours. This is *in addition* to the duty of *registering* the birth, which can be done any time within six weeks.

THE LEICESTER HEALTH SOCIETY.

During the year a new voluntary society has been formed under the title of the Leicester Health Society, with the object of co-operating with the Sanitary Committee of the Corporation in improving the health conditions of the town.

A voluntary organisation of this kind, backed by intelligent and enthusiastic workers, can undoubtedly do very much towards furthering this object, and especially in helping to stimulate an active public interest in health questions. Already the Society has accomplished a good deal. A paid officer, a qualified sanitary inspectress (Mrs. Barnes) has been engaged, and this lady, who is exceptionally well fitted for the post, has done much excellent work. From the first, one of her special duties, and one to which the Society has allowed her to devote the greater part of her time, has been to assist with the work of the Corporation Milk Depot. She has undertaken all the visiting at the homes to which the Depot milk is supplied, and in this way is able to keep in touch with the mothers, and to exercise that necessary supervision without which the full benefit of an infants' milk depot cannot be secured. I have no hesitation in saying that part of the success of the Depot has been due to the great assistance which the Health Society has in this way rendered. Individual members* of the Society have also shown their practical interest in the work by repeatedly attending at the Depot, and assisting in the weighing of the babies, etc.

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* My special thanks are due in this connection to Mrs. Bernard Ellis, Hon. Sec. of the Society, and to Mrs. Wodehouse Simpson.

Amongst other directions in which the activity of the Health Society has been manifested may be mentioned: organising public lectures on health subjects, a systematic course of instruction on Hygiene, and a course of lectures for midwives; the organisation of a small body of voluntary health visitors; and the formation of a sub-committee for the after-care of phthisis patients who have returned from sanatoria.

ACCIDENTS FROM FIRE.

Every year a number of children lose their lives by accidents from fire. During the past year the deaths from burns and scalds in Leicester amounted to 17, of which 12 were of children under five years. The cases proving fatal are, of course, only a small proportion of the total number of children who suffer injury, more or less serious, from this cause. Injuries from fire are specially deplorable in the case of children because of the permanent disfigurement and crippling which they are so apt to cause. There is little doubt that many of these accidents could be prevented by the exercise of a little more care and foresight on the part of parents and guardians, and, in the hope of stimulating this, your Committee are now issuing the following handbill which is distributed by the Health Visitors.

CAUTION.

Danger of Fire to Young Children.

Parents and guardians are urgently cautioned against the dangers of *fire* and *hot water* to young children.

Every year in Leicester children are *burnt or scalded to death*, and many others are *disfigured for life*.

Many accidents may be prevented by care and foresight.

FIRE-GUARDS.—Never leave children alone with an unguarded fire. Every house where there are children should have a fire-guard.

PLAYING WITH FIRE.—Teach children early the danger of fire, and punish them severely if caught playing with fire.

FLANNELETTE.—Flannelette night gowns are very inflammable.

Boiling Water is Very Dangerous.—Never leave a kettle or other vessel containing boiling water within reach of children. Turn the spout so that if the kettle boils over it will do no harm. Many children have been killed by trying to drink out of a kettle or tea-pot. Last year in Leicester two children were scalded to death by upsetting hot tea over themselves; another by upsetting a bucket of hot water.

N.B.—Think *beforehand*. It is too late to think *after* an accident has happened.

(Signed) MEDICAL OFFICER OF HEALTH.

Issued by order of the Sanitary Committee.

FEMALE SANITARY INSPECTORS.

It is coming to be generally realised that there is a definite sphere of usefulness for women in connection with sanitary work, especially in visiting the homes of the poor and giving advice where necessary.

It is twelve years since the first sanitary inspectress for Leicester, Mrs. H. Hartshorn, was appointed, and it was thought that the time had arrived when the appointment of a second officer was justified. Mrs. E. Allen was accordingly appointed on November 12th, 1906, and commenced her duties on December 6th.

The Borough was divided into two districts, east and west, the dividing line being drawn along Belgrave Road, Belgrave Gate, Gallowtree Gate, Belvoir Street, and Welford Road, and each inspectress takes her own district.

HOUSES UNFIT FOR HABITATION.

The number of houses formally condemned as unfit for habitation was ten. The principal causes rendering them unfit were dampness, dilapidation, and neglect. One house was repaired, and the remainder were placarded and closed by order of the Council.

One house (9, Court E, Britannia Street), which had been placarded and closed in 1905 was, during the year, put into a proper state of repair, and the owner was accordingly allowed to open it again for habitation.

SMOKE ABATEMENT.

Following upon the report of the delegates to the Conference on Smoke Abatement, held in London in December, 1905, the Sanitary Committee decided in future to institute legal proceedings in all cases where black smoke is emitted from chimneys connected with engines, furnaces, etc., for *six* minutes or more in an hour. Previously the limit was eight minutes. This is certainly a step in the right direction, and experience has proved that no hardship is inflicted by it upon manufacturers. At present Leicester will compare favourably as regards purity of atmosphere with most large manufacturing centres, but every year the town is growing larger, fresh chimney stacks are being erected, and more and more impurities are being poured into the air, so that increasing stringency of regulations is certainly called for.

Another step forward has been the institution of a course of *Lectures on Stoking* at the Technical School. The first series was a great success, being largely attended. It is now recognised that faulty stoking is one of the principal causes of smoking chimneys, but the proper training of stokers has hitherto received no attention or encouragement.

WATER SUPPLY.

The present water supply of Leicester is upland surface water collected in three impounding reservoirs on the Charnwood Forest. The total area of the gathering ground is 10,760 acres. The reservoir at Thornton is the oldest, and was constructed under the Act of 1847. The Bradgate reservoir was built next, under the Act of 1866, whilst that at Swithland was built under the Act of 1890. The total capacity of the three reservoirs is 1,379,000,000 gallons supplying a population of over 265,000 persons.

The water supply undertaking was taken over by the Corporation in 1878.

Owing to the rapid growth of the town in recent years it became imperative to provide for a further supply, and repeated efforts to obtain an adequate supply of good water in the neighbourhood of Leicester having failed, the great Derwent Valley Scheme was entered upon some years ago, by which Leicester, in conjunction with Sheffield, Derby, and Nottingham, is to obtain a magnificent supply of excellent water from the watershed of the river Derwent, in North Derbyshire. The vast works in connection with this great scheme are being pushed steadily forward, but it will be some time before the water reaches Leicester. When it does come, the water problem for Leicester will be solved for many years. In the meantime the danger of a water famine, such as threatened in 1905, has been temporarily guarded against by an arrangement which has been entered into with the Loughborough Corporation for a supply of water from the Blackbrook reservoir, after the needs of Loughborough have been satisfied. Thanks to this arrangement, it was not necessary, in spite of the hot and dry summer of 1906, to resort to any of the measures of economy and restriction which had to be observed in the previous year.

REFUSE DISPOSAL.

The system of Refuse Disposal in Leicester is briefly as follows: House refuse is collected in portable galvanised iron dust-bins provided with covers. These are emptied by the Corporation once a week, and in some cases twice a week, two-wheeled carts, having a capacity of two cubic yards, being used to convey the contents to the Corporation destructors, of which there are four in different parts of the town. The average distance that refuse has to be carted is threequarters of a mile. In addition to the portable dust-bins, which are insisted upon in all new houses, a diminishing number of dry ash-pits still remain. The number of men employed upon the work is:—portable ash-bin men, 76; ash-pit men, 24; men employed at the destructors, 42; various, 20; total, 162.

The amount of refuse destroyed in 1906 at the different destructors was as follows:—

	Tons.
Nedham Street	10,254
Mill Lane	13,075
The Lero	13,158
West Humberstone	9,745
Total . ..	46,232

SLAUGHTER HOUSES.

In addition to private slaughter houses, of which there are 71 in different parts of the Borough, Leicester possesses a Corporation Abattoir, situated on the Aylestone Road, comprising eighteen slaughter houses. Twelve of these were erected about thirty years ago, and the other six in 1896. Seventeen are let to private tenants, some of whom sub-let to others; whilst only one is reserved for casual slaughtering. The receipts amounted in 1906 to £380. The approximate number of animals slaughtered annually is —beasts 4,500; sheep 10,400; pigs 15,000. Both the Corporation and the private slaughter houses have been repeatedly visited during the year by the meat inspectors.

CREMATION.

The number of cremations performed at the Leicester Crematorium during 1906 was twelve, which is three less than in the previous year.

The number each year since the Crematorium was opened has been as follows:—

	No. of Cremations.
1902	1
1903	5
1904	8
1905	15
1906	12

The number of British Crematoria is now thirteen; five of these, viz., the Hull, Leicester, City of London, Bradford, and Sheffield Crematoria—are municipal enterprises. The total number of cremations performed in *Great Britain* during 1906 was 743, as compared with 604 in 1905.

APPENDIX I.

REPORT

ON THE

CORPORATION OF LEICESTER INFANTS' MILK DEPOT.

The Infants' Milk Depot was opened to the public at 217, Belgrave Gate, on July 6th, 1906. It has thus been in operation (up to end of 1906) for practically six months.

The object of the Milk Depot is to provide for the needs of infants amongst the working classes whose mothers are unable to suckle them. It has long been known that infant mortality is far greater amongst hand-fed than amongst breast-fed infants, and the contrast becomes greater the lower we go in the social scale. It is easy to understand why this should be so. The food supply of the *breast-fed* babe is comparatively little affected by such conditions as dirt, negligence, and squalor (and poverty must be very extreme before it affects the quality of the mother's milk); but it is far otherwise in the case of the unfortunate babe brought up "*on the bottle.*" Even when all external circumstances are favourable, as in the houses of the well-to-do, the bottle-fed babe is usually at a disadvantage; but amongst the poor the handicap is far greater. To properly adapt cow's milk to the varying needs of an infant—to dilute it in order to reduce the proportion of casein, and at the same time to make good the deficiency in sugar and fat thus produced—is a matter requiring much care and attention, considerable intelligence, and a sufficiency of utensils, etc. To prevent the possibility of contamination of the milk through "souring" is even more difficult, and, under existing conditions, especially in the hot weather of summer, it is certainly the case that much improper feeding occurs. Whilst it is very desirable by the spread of education, especially in our public elementary schools amongst the mothers of the future, to remedy this state of things as far as possible, it is our duty to endeavour to rescue as many as possible of the unfortunate infants who are perishing through improper feeding at the present time. It is with this object in view that Infants' Milk Depots have been started in several of our large towns. The advantages, amongst others, claimed for the system are as follows :—

1.—A sufficient supply of good pure milk is secured to each infant.

2.—The milk is properly modified, on scientific principles, to adapt it to the requirements of the infant.

3.—Being partially sterilised and put up in sealed bottles, which are only opened at the time of feeding, the milk is protected from contamination and "souring" so common with ordinary milk under the conditions existing amongst the poor, especially in hot weather.

4.—Regularity of feeding, and in quantities adapted to the age of the infant, is greatly facilitated.

THE SUPPORT OF THE MEDICAL PROFESSION.

Before the scheme was finally decided upon a conference of medical men practising in the Borough was convened by the Sanitary Committee, and the objects and details of the scheme were laid before them. It at once received their cordial approval, and it may be stated here that the Milk Depot has received the warm support of the medical profession ever since it was started. This is proved by the fact that no less than 56 per cent. of the babies have been brought to the Depot on the advice of medical men.

DETAILS OF THE SCHEME.

The premises selected for the Depot were a house and shop at 217, Belgrave Gate, the situation being undoubtedly a very good one. It is in a main thoroughfare, with a tram service passing the door, not more than half a mile from the Clock Tower (the centre of the town); and, most important of all, it is right in the midst of that part of the Borough where infantile mortality is highest. The infants fed from the Depot, however, have been by no means confined to the immediate neighbourhood, but have come from almost all parts of the Borough. The staff at the Depot consists of a Manageress, an Assistant, and two boys; and the business of

selling and distributing the milk, and weighing the babies, is done at the Depot. It was decided that, as the scheme was admittedly an experiment, it would be wiser in the first instance for the Corporation not to undertake the actual preparation of the milk, as this involves the use of machinery the purchase of which would entail considerable outlay. Moreover, in some of the towns which have begun by putting down machinery, the initial installation has proved inadequate and has had to be altered and enlarged at considerable expense.

Arrangements were accordingly made with the Leicestershire Dairy Co. that they should undertake the work of preparing and bottling the milk at their dairy premises at South Wigston, where they were already doing a large business in sterilised milk. The milk for the Infants' Milk Depot is obtained from two farms within a few miles of South Wigston, and the process of humanising and sterilising can be begun within an hour or two from the time the milk leaves the cow. As soon as the process is completed and the milk cooled, it is packed in crates and sent by road, a distance of about four miles, to the Infants' Milk Depot, in Belgrave Gate. It is only right to state here that the Leicestershire Dairy Co. have shown themselves most anxious to meet our requirements, and the managing director, Mr. Blunt, has personally taken the greatest interest in the scheme. There are, no doubt, some inherent drawbacks in such an arrangement, *e.g.*, the distance the milk has to be brought after bottling has a tendency to "churn" the milk in warm weather. The Dairy Co., however, are now putting down a refrigerating plant so that the milk can be more efficiently cooled before it is despatched, and this will, no doubt, also help to obviate a difficulty which we experienced during the very hot weather of the past summer from the milk sometimes not keeping well. On the whole, I consider the arrangement with the Dairy Co. has been a wise one, and if and when the time comes for the Corporation to undertake this part of the work themselves, they will be in a much better position to know exactly what their requirements will be than if they had undertaken it from the outset.

The process of modifying or "humanising" consists in the dilution of cow's milk with a varying proportion of water according to the age of the infant, and in the addition of cream and sugar.

The proportions are given in the table appended.

THE PROCESS OF BOTTLING.

After modifying, the milk is put up in small bottles, each bottle containing sufficient for a single feed. This is one of the special features of the system, but it is also one which greatly increases the trouble and expense. The number of bottles required is very large ; thus, a day's supply for 200 infants, with an average of eight bottles per child, amounts to 1,600 bottles, and on Saturday, when Sunday's supply has also to be given out, double this number has to be dealt with.

THE PROCESS OF STERILISING

After the bottles have been filled and stoppered they are placed in the steriliser. The temperature to which the milk is raised and the length of time it is kept up varies. In the heat of summer it is found necessary to raise it to 212° for thirty minutes, and even this was not always sufficient. In the winter, on the other hand, it was found that "Pasteurising," that is, raising the milk to a temperature of 180° was all that was necessary.

In order to meet the requirements of infants of different ages and constitutions, no less than eleven different modifications have to be prepared, the quantities of each modification required being ordered by the Manageress at the Depot the day before.

The humanised milk arrives at the Depot each day about 1 p.m., and it is immediately taken out of the crates and put up in specially made wire baskets. The milk is called for in the course of the afternoon by the public, the usual practice being, in the case of people living within a reasonable distance, to send a child for it after school is over. It is surprising what long distances people have been willing to send in order to obtain the milk.

DELIVERY OF THE MILK.

To meet the case of persons who are unable to send or call for the milk, owing to the distance being too great, or otherwise, arrangements have been made for delivering the milk at a small extra charge, varying from 3d. to 6d. a week according to distance. Two boys are employed for this purpose, and a light hand-cart is used. It is found that this arrangement can be made self-supporting. At the present time milk is being delivered to about fifty customers in different parts of the town.

MEDICAL SUPERVISION OF THE WORK.

Those who have had experience in the work of Infants' Milk Depots, both in this country and abroad, lay great stress on the importance of the work being under close medical supervision. A very large proportion of the infants brought to the Leicester Milk Depot have been ill—many of them seriously ill—and in consequence the Depot more resembles an infants' dispensary than a mere milk shop. It is certainly very important, if the best results are to be obtained, that every case should be carefully surpervised and the milk supplied be adapted as far as possible to the particular requirements of each. Ever since the opening, the Medical Officer of Health has personally attended at the Depot two afternoons each week and at these times the mothers come and consult him and bring their infants for him to weigh and inspect. He ascertains how far the milk is agreeing, varies the quality and quantity of the milk when necessary, and gives advice as to the method of feeding. The infants are brought for this purpose every two or three weeks.

THE ASSISTANCE OF THE HEALTH SOCIETY.

From the very beginning the newly formed Leicester Health Society have manifested the greatest practical interest in the work of the Depot. As soon as it was opened they placed their paid Health Visitor, Mrs. Barnes, at the disposal of the Medical Officer of Health, and she has taken entire charge of the outside work of the Depot, *i.e.*, she periodically visits every case at its own home; ascertains that the milk is being properly used, and that the child is progressing; gives advice where necessary, or urges that the baby be brought to the Depot (when this is not being done) to be seen by the Medical Officer of Health. In this way the beneficial influence of the Depot is greatly increased. Mrs. Barnes, whose whole heart is in the work, and who has very special personal qualifications for it, has undoubtedly done very much by the kindly sympathy she has shown, and the practical help and advice she has been able to give, to popularise the Milk Depot and make it a success.*

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*It is interesting to note in this connection that both at Glasgow and at St. Helens a qualified medical woman has been specially appointed for this purpose, showing the importance that is there attached to this part of the work.

Mothers have felt that a personal interest was taken in their children, and that the Milk Depot was something much more than a mere shop where milk for infants was sold.

Personally, I feel under a great obligation to the Health Society for the great help which they have afforded in this way.

THE PRICE OF THE MILK.

The price charged for the milk varies according to age. During the summer it was as follows :—

Under 3 months old	..	1s. 2d.	per week	or 2½d.	per day.
Under 6 months old	..	1s. 6d.	,,	,, 3d.	,,
Under 12 months old	..	1s. 9d.	,,	,, 3½d.	,,

After November 1st it was raised 2d. per week, the price per day remaining the same.

ASSISTANCE FROM THE GUARDIANS AND CHARITY ORGANISATION SOCIETY.

In cases where the District Medical Officers recommend the milk, the Relieving Officers are empowered to give orders for it : 33 cases were thus assisted, but the average period for which the milk was supplied per case was only three weeks, which is too short to be of very much value. In other cases, not in receipt of parish relief but unable to pay for the milk, the Charity Organisation Society has intervened ; 18 cases were assisted in this way, the average period per case being eight weeks. The Charity Organisation Society are allowed a small discount off the price of the milk.

STATISTICS.

The conditions under which a milk depot is worked are such that statistics are calculated to be rather misleading. Attempts have been made sometimes to compare the mortality amongst children fed upon the milk supplied from a depot with the general rate of mortality prevailing during the same period. There are several reasons, however, why such a comparison, whatever the apparent deduction, should be viewed with suspicion, but chiefly because the infants brought to a depot are "selected." This may tell in favour of the depot, or, as in our own case, where a very large proportion (about 70 per cent.) of the infants brought were ill or not thriving, it may tell altogether against it. At present moreover, the period covered—six months—is too short including as it does the worst seasons of the year, autumn and winter.

PROGRESS OF THE DEPOT.

The Depot was opened on July 6th. An advertisement of the fact was sent to the Press, and was also posted up. An intimation was also sent to each medical man and midwife in the Borough.

The following figures show how quickly the Depot sprang into popularity :—

End of Week.	No. of Infants being fed.	End of Week.	No. of Infants being fed.
1st ..	.. 13	8th ..	148
2nd ..	.. 27	9th ..	176
3rd ..	.. 47	10th ..	191
4th ..	.. 48	11th ..	188
5th ..	.. 70	12th ..	195
6th ..	.. 116	13th ..	197
7th ..	.. 125	14th (Oct. 11th)	202

With the end of the diarrhœa season the number of infants declined slightly, and at the end of October it was at 187, of November, 184, and of December, 189.*

The total number of infants whose names were registered at the Depot up to December 31st, 1906, was 566. This number includes, however, a great many who for one cause or another were only supplied for very short periods, in some cases for only one or two days. When the Depot was first opened many mothers, drawn no doubt by curiosity, applied for milk, who probably had no serious intention of continuing with it. Many others came (often sent by doctors) whose babies were in the last stage of diarrhœa, apparently with the hope that possibly we might be able to save them. Many of them were too ill to be fed with milk, and sterilized whey was supplied instead until the child was fit to take milk. Some of these cases, I am glad to say, were saved, but many of course were beyond help.

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* It has since gone up, and at end of January, 1907, it again reached 200.

Classifying the cases according to the period during which they were supplied with milk we get the following table :—

Period.	No. of Cases.
1 week	154
2 weeks	46
3 weeks	32
4 weeks	21
4 to 8 weeks	56
8 to 12 weeks	29
12 to 16 weeks	12
Over 16 weeks	3
Not Classified	13
Still having Milk	200
	566

It is impossible as yet to determine what will be about the average time that cases will continue having the milk. We have some who came to us at the very outset and who are still continuing it.

THE QUANTITY OF MILK SOLD.

The amount of milk supplied from the Depot up to the end of the year (*i.e.*, during the first six months' working) was 5,267 gallons, the actual number of bottles of milk reaching the remarkable figures of 285,316. At the present time about 10,000 bottles are being distributed weekly. Of course, the handling of so many separate bottles greatly increases the labour, and therefore the expense of an infants' milk depot. Moreover, a considerable loss in breakages is inevitable.

AGES OF THE INFANTS.

The following table shows the age distribution of the infants brought to the Depot :—

Age Period.	No. of Infants.	Percentage.
Under 3 months	234	41·3
3 to 6 months	137	24·2
6 to 9 months	83	14·7
9 to 12 months	54	9·5
Over 12 months	58	10·3
	566	100·0

THE CLASS FROM WHICH THE CASES ARE DRAWN.

With one or two exceptions all of the infants brought to the Depot have belonged to the working classes, as shown below :—

OCCUPATIONS OF FATHERS OF INFANTS.

Shoe Trade	143
Hosiery Trade	24
Labourers	46
Carters and Draymen	23
Shop-keepers and Shop-assistants	37
Mechanics, Fitters, etc.	19
Railway Employees	13
Joiners	10
Travellers	9
Publicans	9
Bakers	8
Printers	7
Insurance Agents	6
Clerks	7
Bricklayers	4
Not stated	26
Illegitimate	10
Father Dead	6
Unemployed	37
Various	122
Total	566

The experience at Leicester, however, is similar to that at other infants' milk depots, viz., that it is the careful and anxious parents who come rather than the careless and indifferent, though it is the children of the latter, of course, who would benefit most by the institution. This drawback is apparently inevitable.

NUMBER OF INFANTS WHO DIED.

In considering the following figures it must be remembered that the report deals only with six months' working of the Depot and includes the worst three months of the year as regards infant mortality. Only those cases have been included which were fed on the milk for at least a fortnight. The number of these was 366, and amongst them there were 21 deaths, the causes of death being as follows :—Marasmus 6 ; Diarrhœa 7 ; Convulsions 2 ; Bronchitis 1 ; Pneumonia 1 ; Measles 1 ; Premature Birth 1 ; Uncertain 2. All but four of these infants were actually ill at the time they were brought to the Depot, and even of the four, three were weakly or undersized, so that only one child out of the twenty-one can be regarded as in normal health. Almost all were sent to the Depot on the advice of a medical man. Several recovered from the initial illness, but succumbed later to some intercurrent affection.

CLINICAL EXPERIENCE AS TO EFFECTS OF THE DEPOT FEEDING.

On the whole this was certainly favourable. It is not claimed, of course, that there is any special virtue in cow's milk merely because it has been prepared and sold at a milk depot, beyond the fact that it is of good quality, properly prepared and put up in a way which minimises the risk of its being a vehicle for the germs of diarrhœa. It is not to be supposed, therefore, that it will be of much benefit to children *already* suffering from diarrhœa, or in those cases where other causes of malnutrition than improper feeding exist. But in suitable cases it is undoubtedly productive of excellent results. A letter of appreciation from a grateful parent is appended.

I am satisfied that much good has been accomplished, and I hope that this, our latest effort to combat infant mortality, will be continued. At the same time I recognise that infants' milk depots have their limitations. They are certainly not the last word in the prevention of infant mortality, but are only to be regarded as one of the weapons at the disposal of a community with which to attack this most urgent problem.

C. KILLICK MILLARD,

Medical Officer of Health.

LEICESTER,

26th February, 1907.

DEAR SIR,

I am forwarding you with this letter a photo of our boy, aged 11½ months, fed entirely on Corporation Milk. We are now gradually weaning him, or I might say he is weaning himself, and before we entirely discontinue the use of the milk, his mother and I feel we cannot let the opportunity go by without thanking you and those under you for the kindness and courtesy and the interest you have taken in the welfare of our little one. We have closely followed the advice you have frequently given us, and I think conclusive proof of the good derived from the milk will be seen by the boy's photo, and especially so when I say that his mother is not at all a strong woman, and never weighed more than 6 stone 7 ℔s., whilst baby now turns the scale at 32 ℔s.

We have recommended the milk to several of our friends, some of whom are now trying it, and in each case the infants are thriving on it.

We have never had one bottle bad, it is absolutely no trouble and is far cheaper than any other milk or infants' food. If poor parents knew this and gave the milk a trial, I feel sure that a great deal of the infant suffering and consequent mortality would be averted.

Please accept my grateful thanks.

Yours truly,

THOS. H.

To the *Medical Officer of Health*.

HUMANIZED MILK.

FORMULÆ.

Modification.	Dilution.	Quantity in each Bottle.	Age of Infant.	Number of Bottles per day.	Amount of Milk (modified).
A	1 Milk to 2 Water.	1½ oz.	1 to 2 weeks.	9	13½ oz.
B1	1 Milk to 1 Water.	2½ oz.	2 to 8 weeks.	9	22½ oz.
B2	1 Milk to 1 Water.	3 oz.	2 to 3 months.	9	27 oz.
C1	2 Milk to 1 Water.	4 oz.	3 to 5 months.	8	32 oz.
C2	2 Milk to 1 Water.	5 oz.	5 to 6 months.	7	35 oz.
D1	All Milk.	6 oz.	6 to 8 months	6	36 oz.
D2	All Milk.	7 oz.	Over 8 months.	6	42 oz.
EXTRA MODIFICATIONS FOR SPECIAL CASES:					
A2	1 Milk to 2 Water.	2½ oz.	....	9	22½ oz.
B3	1 Milk to 1 Water.	4 oz.	....	8	32 oz.
C1 extra	2 Milk to 1 Water.	4½ oz.	....	8	36 oz.
C3	2 Milk to 1 Water.	6 oz.	....	7	42 oz.

Sugar (best cane) 2½ ozs. and Salt 1/12th oz., is added to each gallon of mixture, and sufficient cream to bring the proportion of fat to approximately 3·5 per cent.

N.B. Medical Men recommending cases can order which modification they think best.

APPENDIX II.

CHIEF INSPECTOR'S REPORT

UPON THE

WORK OF THE SANITARY DEPARTMENT

DURING 1906.

To the Medical Officer of Health.

Sir,—I beg to submit my Annual Report of work done in the Sanitary Department during the year 1906. Particulars as to the nature and number of nuisances abated will be found in the appended Tables.

I am, Sir,
Your obedient servant,
FRANCIS BRALEY, Cert. San. Inst.,
7th May, 1907. *Chief Inspector.*

REPORT FOR 1906.

The usual systematic house to house inspection has been carried on during the year; the number of inspections 18,473 is somewhat less than in the previous year owing to the great number of visits made by the inspectors in connection with contagious disease, the number being 11,675 compared with 6,491 in 1905.

The smoke testing of drains is an important duty carried out by the inspectors as will be seen on reference to statement E. Applications are frequently made by persons to have the drains on their premises tested although they have no cause to suspect they are defective.

There were 166 men, 54 women, 22 children above five years of age, and 19 under five found occupying the 98 canal boats inspected. The number of canal boats on the register is 124. Two were registered during the year.

Prosecutions have been instituted against persons for offences under the Food and Drugs Acts, Seats for Shop Assistants Acts, and Local Bye-Laws and Regulations, viz. :—

For having four quarters of veal in his possession that was unfit for human food a butcher was fined £10 and costs. In another case a butcher was fined £20 and costs or three months' imprisonment for exposing a quantity of beef for sale which was diseased and unfit for the food of man.

A butcher was fined £30 or three months' imprisonment for exposing for sale on his premises a quantity of beef unfit for human food, and for aiding and abetting him in the offence one man was fined £10 or six weeks' imprisonment, and another £5 or a month.

For selling adulterated butter one defendant was fined £10 and costs or six weeks' imprisonment, another 20s. and costs. A fine of £5 was inflicted on a grocer for selling adulterated mustard. For obstructing an inspector in the course of his duties a shopkeeper was fined £5.

For not providing seats behind his counter for his female assistants a tradesman was fined 20s. and costs.

A firm was summoned for exposing for sale on their premises a bag of mussels which were unfit for human consumption. The case was dismissed.

Six persons were summoned for failing to manage their furnaces on their premises so that the smoke arising therefrom was not effectually consumed or burnt, and were each fined 20s. and in four instances their stokers were also summoned and fined 5s. each.

STATEMENT A.

Showing the work done by the Sanitary Staff during the Year 1906.

	No. of Visits.
Systematic House to House Inspections	18473
Investigations of Complaints	18422
Visits to ascertain the progress of Sanitary and Informal Orders	14765
Visits in connection with Contagious Diseases	11675
Visits to Common Lodging Houses	843
Visits to Bakehouses	559
Visits to Canal Boats	76
Visits to Workshops	757
Visits to Retail Shops	64
Visits to Refreshment Room Kitchens	7
Visits to Fish Shops	174
Visits to Caravans	152
Visits to Tripe Houses	14
Visits to Marine Stores	12
Visits to Home-workers	198
	66,191

Samples of Food, etc., purchased for Analysis under Adulteration Acts	420
Samples of Well Water submitted for Analysis	2
Observations for the purpose of Smoke Prevention	3269
Stacks reported for Smoke Nuisance	43
Houses Disinfected by the Sanitary Staff	2561
Swine reported to Medical Officer of Health	39
Filthy Houses ditto ditto	43
Dilapidated Houses ditto ditto	16
Prosecutions under the Public Health and Local Acts	11
Prosecutions under the Food and Drugs Acts	7
Houses to which Smoke Test was applied	873
Public Buildings, Factories, etc., ditto	13
Houses to which Liquid Test was applied	89
Public Buildings, Factories, etc. ditto	7
Visits to Dairies and Milkshops	1008
Letters (including Complaints of Nuisances) received	3471
Letters (including School and Sanitary Notices) sent out from the Offices	7574

STATEMENT B.

During the year Formal and Informal Notices have been served to abate Nuisances as follows:—

	No. of Orders.
To abolish Manure-pits and Ash-pits	148
,, repair ditto ditto	3
,, provide Ash-tubs or Bins	2604
,, abolish Privies	14
,, abolish Pail Closets	15
,, erect New Water Closets	37
,, repair, alter, or rebuild Closets	4
,, fix Closet Hoppers and Syphons	120
,, fix Flushing Apparatus and lay on Water Supply	79
,, repair ditto and ditto	52
,, alter and ventilate Soil Pipes	10
,, stop up or disconnect Cellar Drains	8
,, lay New Drains	5
,, relay or repair Defective Drains	220
,, clear Choked Drains	864
,, cleanse or repair Cisterns	49
,, fix lead or iron Sink Wastes	34
,, fix Traps or Gully Gratings	157
,, reset Gullies or provide new Gratings	59
,, erect, alter, screen, or repair Urinals	17
,, repair, rehang, or provide new Doors for Closets and Dwellings	56
,, repair, renew, and make good Spouting ..	247
,, cleanse and limewash Closets and Passages ..	334
,, pave Yards and Passages, or repair Paving ..	342

STATEMENT B. Continued.

	No. of Orders.
To provide new or relay and repair Floors	127
,, repair Roofs	142
,, cleanse and limewash Houses	574
,, ventilate Dwellings	10
,, remove Manure and Offensive Matter	11
,, remove Animals kept in such a condition as to be a Nuisance	29
,, alter Chimneys and Miscellaneous	344
,, reduce Number of Persons occupying Houses ..	13
,, repair Staircases	21
,, fix 4-inch Ventilating Pipes	30
,, repair Walls	62
,, insert Damp Proof Courses	70
,, alter or repair Rain Water Pipes	56
	6967

* The 6967 Defects ordered to be remedied were contained in 3377 Notices, and of these 309 were Formal and 3068 Informal Orders.

STATEMENT C.

Showing the number of Offensive Trades carried on, and Registered and Licensed Premises within the Borough requiring the constant attention of the Inspectors.

Description of Trade.	No.
Slaughter Houses (Registered)	78
,, ,, (Public)	18
Tripe Houses	33
Common Lodging Houses	33
Bakehouses	251
Cowsheds	49
Milk Shops and Dairies	750
Tallow Melters	1
Chemical Works	2
Tanners and Fellmongers	2
Bone Boilers	1
Knacker's Yard	1
Gut Scrapers	2

STATEMENT D.

Showing the number of Visits made by the Inspectors of Meat, and the quantity of Meat, etc., condemned during the year 1906.

No. of Visits to Slaughter Houses, Shops, and Cowsheds, etc.	10437
No. of Visits to Cattle Market	419

MEAT, ETC., CONDEMNED AND DESTROYED.

	Tons.	Cwts.	Qrs.	Lbs.
Meat	22	2	0	19
Fish	23	19	3	17
Fruit	1	8	3	16
Vegetables	0	8	3	10

Rabbits	5049
Preserved Foods	901
Poultry	122
Oysters	290
Crabs	80
Eggs	2010
Hares	173
Game	811

STATEMENT E.

Showing the Localities of Sewer Gas Escapes.

Into Breakfast Rooms, Sitting Rooms, and Dining Rooms	7
,, Houses from Rat Holes	15
,, Kitchens and Sculleries	7
,, Basement Kitchens and Cellars	14
,, Lobbies and other parts of Houses	9
,, Internal Water Closets	14
,, External Water Closets	97
,, Yards, from around badly set Gullies, defective Drains, etc.	115
From External and unventilated Soil Pipes ..	6
,, Heads and Joints of downright Rain Water Pipes	27
,, Untrapped Rain Water Cisterns	3
,, Gullies in Stables	2
,, Ventilating Pipes	14
	330
And in connection with Houses in which Infectious Diseases have arisen	452
Total	782

STATEMENT F.

In connection with Infectious Diseases Inspection, the following defects were found, either in the houses referred to in the certificates, or in the houses, closets, etc., in the same yard.

	No.
Defective and Foul Ashpits	32
,, and dilapidated Closets	2
,, and choked Drains	22
,, and unventilated Soil Pipes	3
,, Urinal, Bath and Lavatory Wastes	5
,, Paving and Surface Channels	12
,, Untrapped or badly set Gullies to Sink and Yard Drains	34
,, Cellar Drains (direct to Sewers)	1
,, Water Closet Hoppers and Flushing Apparatus	15
,, Spouting	10
Foul Brick and Defective Shafts to Sinks	21
Foul and Defective Rain Water Cisterns	6
Filthy Urinals, Closets and Passages	14
Filthy Houses	55
Escapes of Sewer Gas into :	
External Closets	39
Living Rooms and Sculleries	3
Yards, from defective Drains, badly set Gullies, or Rain Water Pipes connected direct with the Sewers or Drains	178
	452

STATEMENT G.

In connection with the Inspection of Factories and Workshops, the following Sanitary defects have been found, and Formal and Informal Notices served.

	No. of Orders.
To abolish Manure and Ash-pits	9
,, provide Ash-tubs or Bins	27
,, erect New Water Closets	39
,, fix Closet Basins and Syphons	17
,, repair Flushing Apparatus and lay on Water Supply	10
,, alter and ventilate Soil Pipes	5
,, relay or repair defective Drains	9
,, clear choked Drains	15
,, fix Traps or Gully Gratings	22
,, erect, alter, screen, or repair Urinals	12
,, provide new, or relay or repair Floors	35
,, repair Roofs	10
,, cleanse and limewash Workshops	76
,, repair Walls	5
,, fix 4-inch. Ventilating Pipes	15
,, provide Light and Ventilation	20
Total	326

APPENDIX III.

ISOLATION HOSPITAL REPORT,

For 1906.

By JOHN LAMBIE, M.B., Ch.B., D.P.H.

On 31st December, 1905, there were 166 patients remaining in the hospital. During the year 1,765 patients were admitted, and on 31st December, 1906, there were 211 remaining.

The admissions were as follows:—

Scarlet Fever	1471
Diphtheria	166
Enteric Fever	58
Phthisis	69
Small Pox	1
Total	1765

The number of admissions is the largest since the opening of the new hospital, and the resources of the hospital were taxed to the utmost to meet the demand for accommodation. The recent epidemic of scarlet fever accounts for the largely increased number of admissions. Owing to the increased requirements of the scarlet fever patients the number of phthisis patients had to be reduced by about one-half.

SCARLET FEVER.

The number of scarlet fever cases in hospital began to go up during the last few months of 1905, and it continued to increase steadily till the second week of November, 1906, when it reached its maximum of 239. The number declined considerably during the last few weeks of the year.

The type of the disease varied in severity during the year, the worst type of case being admitted in January and April.

During the year 37 deaths of scarlet fever patients took place, giving a mortality of 2·5 per cent. Six of the cases died within forty-eight hours of admission, and other six within four days, the majority of these being of the malignant type. Two of the fatal cases died from causes which were not in any way connected with the attack of scarlet fever. Three died from uraemia, one having been admitted with it and in a moribund condition. The remaining fatal cases were of the septic type of the disease.

As regards the ages of the fatal cases, 23 were five years old or under, and the remainder, with the exception of two, were twelve years old or under. The two cases referred to were men, one twenty-seven, the other forty-one years of age. The first died from an exceptionally acute attack of nephritis with uraemia, and the other died two days after admission from heart failure, being one of the malignant cases before referred to.

It is interesting to note that no fewer than 159, or 10·8 per cent., of the cases admitted were over fifteen years of age.

The average period of isolation was 42·8 days. The subject of return cases has already been dealt with by Dr. Millard (see p. 53).

DIPHTHERIA.

There were 166 cases admitted as diphtheria during the year, and of these 16 died. Of those admitted, 6 were found to be suffering from scarlet fever, one from simple laryngitis following measles, and one from tonsillitis. Of these eight, one died, leaving 158 cases of diphtheria with 15 deaths, and giving a diphtheria case-mortality of 9·5 per cent.

It happens in certain cases of scarlet fever that the throat condition is indistinguishable clinically from that in diphtheria, both before the appearance and after the disappearance of the rash. The six cases mentioned above were instances of this.

The 15 fatal cases may be classified as follows :—

Died from	Heart Failure	7
,,	Diphtheritic Broncho-Pneumonia	2
,,	Coma from Primary Intoxication of the Disease ..	3
,,	Purpura Hæmorrhagica ..	1
,,	Exhaustion in Laryngeal cases in which operation was too late to be of any avail..	2

Operation Cases.—A considerable number of laryngeal cases were admitted, and in 15 it was found necessary to perform intubation. Of these, four died, and the rest made good recoveries.

Tracheotomy was performed on one of the fatal cases as a last resort. One case was admitted *in extremis* and tracheotomy was performed at once, but the patient died about an hour later.

In addition to the cases operated on in the hospital, three had tracheotomy performed at the General Infirmary before admission. Of these, one died, and the others made good recoveries. The average period of isolation was 30·8 days.

ENTERIC FEVER.

Fifty-eight cases notified as being enteric fever were treated in hospital, and of these 10 died, but it was found that 6 of the admissions, including two of the fatal cases, were not suffering from enteric fever, so that 52 genuine cases were treated, with 8 deaths, giving a case-mortality of 15·4 per cent.

The fatal cases may be classified as follows :—

Died from	Perforation of the Bowel ..	4
,,	Exhaustion	3
,,	Typhoid Pyelitis	1

The fatal cases which were not enteric fever were : one of tubercular meningitis and one of general tuberculosis.

Early in 1906 an unfortunate outbreak of enteric fever occurred amongst the staff engaged in nursing this disease. Four nurses and one ward-maid contracted the disease in February and March, and a fifth nurse later in the year. One of the nurses, Miss Florence Baker, a young and promising probationer, took the disease in a very severe form, and died from it after an illness of about five weeks. The reason why so many of the staff contracted this disease could never be explained, but it is noteworthy that no one was attacked except those on duty in the enteric wards. The average period of isolation for this disease was 45·5 days.

SMALLPOX.

Only one case of smallpox was treated in the hospital during the year. It necessitated the opening of the Smallpox Hospital from July 9th till August 8th.

PHTHISIS.

Sixty-nine cases of phthisis were admitted during the year, and of these, one died whilst in hospital. This number is less than half the previous year's admissions.

This was due to two causes :—(1) lack of accommodation and (2) increased average time of treatment of each patient. The primary object of treating phthisis patients at the Borough Hospital was that the treatment should be educational, so that the patient should learn not only how to treat himself at home, but also how to prevent his disease spreading to others. Last year, however, a special attempt was made to lengthen the period of treatment in all suitable cases, so as to effect more permanent improvement. Unfortunately, a number of suitable patients refused to avail themselves of extension of time when offered it, for such reasons as family worries, fear of losing work, etc. It is to be feared, too, that in a number of cases the benefit derived from treatment at the hospital has been rendered of but little avail by the fact that the patients have had to return to their former indoor occupations immediately on leaving hospital.

A few, however, have been able to break away from their former mode of living and to take up more suitable employment, and it is pleasing to find that in the majority of these cases the results have been satisfactory. One patient has gone to South Africa, and another to Canada, both to outdoor employment. Both are well and happy up to the present.

Two others have obtained employment on the Corporation Trams. I have seen both within a few weeks of the time of writing and they state that they have never had a day's illness, beyond a slight cold, since leaving the hospital. There are several others who have changed their occupations with pecuniary disadvantage but with beneficial results as regards health.

It would be a very great help in the hospital treatment of phthisis if some practical means were found of providing suitable work for patients discharged from hospital. Most of the patients on leaving the hospital should be able to do sufficient work to keep themselves, and, provided it is of a suitable nature, work which is within the limits of their strength does them good.

USE OF ALCOHOL.

Alcohol as a drug has been the subject of much discussion and controversy during the past year. It seems certain that scientific medical opinion is slowly but surely turning against the indiscriminate use of alcohol as a stimulant.

At the Borough Hospital less than eight fluid ounces of alcoholic stimulant were used during the year. We do not believe that in fever cases it is of value as a stimulant, particularly when it is given in continued doses.

HONORARY CHAPLAIN.

Canon Gedge has continued his good work on behalf of the institution, visiting the hospital once a week, and giving up an entire afternoon for this purpose. In addition to his spiritual work, many patients have benefited by personal acts of kindness and generosity at his hands.

GIFT OF PHONOGRAPH AND RECORDS.

In May a magnificent phonograph and records were presented to the institution by the relatives of Joseph Morris, 88, St. Saviour's Road. At that time Joseph Morris was a patient in the hospital, and was convalescent after a very severe illness. His friends noticed how much the music of the gramophone presented last year by Sir Tollemache Sinclair was appreciated in the wards, so they decided to present a phonograph to the institution. Both these instruments have given great pleasure to patients of all ages. Sir Tollemache Sinclair made another generous gift of records last New Year.

HOSPITAL STAFF.

In addition to the nurses and maid mentioned before as having contracted enteric fever, four nurses developed scarlet fever during the year. This is not at all surprising, considering the large number of severe cases of this disease the nurses had to attend to. No member of the staff contracted diphtheria.

GIFTS TO THE HOSPITAL.

The following gifts to the hospital, amongst others, have been gratefully received during the year:—

SUBSCRIPTIONS TO CHILDREN'S TOY FUND.

	£	s.	d.
Mr. A. B. Copley (part proceeds of concert)	2	5	0
Mr. H. Bowmar	2	0	0
Mr. Maurice Levy, M.P.	1	1	0
Mr. C. Tarratt	0	5	0
Mr. L. Parsons	0	2	6
Mr. S. Aldwinckle	0	2	0

Gifts.

Rev. Canon Gedge. Toys, oranges, tobacco, and articles of clothing.

Mr. G. Lee, 333, Gallowtree Gate. Toys, games, etc.

Messrs. H. and A. Bennett, Market Street. Toys, etc.

Mrs. Perry Herrick. Holly.

Anonymous. Books.

King Richard's Road School (per Miss Franklin and Mr. Eagle). Fruit, cakes, etc.

Girls' Friendly Society (per Miss Craig). Dressed dolls, etc.

Mrs. Fairfax Scott, Mountsorrel, Parcel of Handkerchiefs.

Kindergarten Girls' Collegiate School. Books, etc.

Mrs. James Ellis. Magazines.

Preparatory and Kindergarten School (per Miss Stanyon). Doll's House.

Dr. Lakin. Magazines.

Miss Phyllis Craven. Scrap-book, etc.

Midland Educational Company. Games, etc.

Miss Marshall. Toys.

Scholars of Wyggeston Girls' School. Toys.

Alderman Windley. Magazines, etc.

Holiday School, Milton Street (per Miss C. Gittins). Paper Flowers.

Children—Ellis Avenue School (per Miss Coliss). Books and Toys.

Miss Grace M. Bailey, and a few friends. Large See-saw Boat.

BACTERIOLOGY.

The bacteriological work of the hospital was much heavier than usual, nearly 300 specimens of suspected enteric fever, diphtheria, and phthisis having been examined during the year.

The usual tables are appended, together with a new one shewing the cost per patient per day for the past six years.

JOHN LAMBIE, M.B., Ch.B., D.P.H.

TABLE A.

Number of Patients Admitted, Discharged, and Died during 1906.

DISEASE.	Remaining, 31st December, 1905.	Admitted during Year.	Discharged during Year.	Died during Year.	Remaining, 31st December, 1906.
Scarlet Fever	132	1471	1385	37	181
Diphtheria	11	166	152	16	9
Enteric Fever	9	58	45	10	12
Phthisis	14	69	73	1	9
	...	1	1	...	...
TOTAL	166	1765	1656	64	211

TABLE B.

Showing Number of Patients Admitted, Number of Days in Hospital, and Average per Patient.

	Scarlet Fever.			Diphtheria.			Enteric.			Smallpox.			Phthisis.			Total.		
	Patients.	Days.	Average.	Patients.	Days.	Average.	Patients.	Days.	Average.	Patients.	Days.	Average.	Patients.	Days.	Average.	Patients.	Days.	Average.
1901 ...	491	19885	40·5	592	18056	30·5	60	2724	45·4	4	116	29·0	...	...	...	1147	40781	35·5
1902 ...	588	26460	45·0	183	7557	41·3	54	2192	40·6	18	678	37·7	...	...	...	813	36887	43·7
1903 ...	130	5850	45·0	47	1245	26·5	24	1209	50·4	388	12439	32·2	63	2493	39·5	652	23290	35·7
1904 ...	239	10277	43·0	26	793	30·5	37	1665	45·0	293	8672	29·6	121	3827	31·6	716	25234	35·2
1905 ...	739	30080	40·7	89	2324	26·1	43	1946	45·2	5	175	35·0	157	5860	37·3	1037	40515	39·0
										2 Erysipelas	130	65						
1906 ...	1471	62983	42·8	166	5117	30·8	58	2612	45·5	1	30	30	69	3864	56·0	1765	71635	42·2

Cost of administration of Isolation Hospital (exclusive of Buildings, etc.) for each of the six years ending 31st March, 1907, with average cost of each item per patient-day.

PARTICULARS.	Year 1901-2.		Year 1902-3.		Year 1903-4.		Year 1904-5.		Year 1905-6.		Year 1906-7.	
	Amount. £ s. d.	Average cost per patient-day. s. d.	Amount. £ s. d.	Average cost per patient-day. s. d.	Amount. £ s. d.	Average cost per patient-day. s. d.	Amount. £ s. d.	Average cost per patient-day. s. d.	Amount. £ s. d.	Average cost per patient-day. s. d.	Amount. £ s. d.	Average cost per patient-day. s. d.
Wages	1,685 11 3	0 9·91	1,695 19 2	0 11·03	1,612 2 4	1 4·61	1,587 17 5	1 3·10	1,716 11 5	0 10·17	1,784 16 9	0 5·74
Ale, etc.	89 7 8	0 0·53	26 7 5	0 0·17	27 15 10	0 0·29	30 14 1	0 0·29	18 0 9	0 0·11	9 16 2	0 0·03
Provisions	1,139 9 3	0 6·70	1,324 11 8	0 8·62	1,299 12 11	1 1·40	1,319 18 5	1 0·55	1,117 19 2	0 6·63	1,352 6 11	0 4·35
Meat	446 12 9	0 2·62	467 4 3	0 3·04	478 7 8	0 4·93	551 3 6	0 5·24	329 14 2	0 1·95	335 2 3	0 1·08
Furniture, etc.	263 17 0	0 1·55	483 6 3	0 3·14	344 1 2	0 3·54	237 14 5	0 2·26	291 9 7	0 1·72	338 7 2	0 1·09
Utensils	58 14 0	0 0·35	57 11 3	0 0·39	26 11 3	0 0·27	45 13 0	0 0·43	39 1 9	0 0·23	35 9 6	0 0·11
*Fuel	910 1 8	0 5·35	830 18 11	0 5·41	681 11 2	0 7·02	636 11 0	0 6·05	702 0 3	0 4·16	712 4 11	0 2·29
Gas	187 2 8	0 1·11	88 2 9	0 0·57	129 1 11	0 1·33	122 9 1	0 1·17	80 17 9	0 0·48	92 16 3	0 0·30
Water	29 8 6	0 0·17	29 13 0	0 0·19	29 5 5	0 0·30	35 14 4	0 0·34	18 13 1	0 0·11	26 11 5	0 0·09
Drugs, etc.	309 3 5	0 1·82	214 5 1	0 1·39	226 16 10	0 2·34	154 18 2	0 1·47	130 1 11	0 0·78	197 13 8	0 0·63
Garden Labour	48 13 9	0 0·29	114 0 10	0 0·74	229 12 4	0 2·37	360 13 9	0 3·43	224 3 2	0 1·33	39 11 11	0 0·13
Miscellaneous	220 3 1	0 1·30	169 6 8	0 1·10	106 0 0	0 1·09	222 8 5	0 2·12	192 16 8	0 1·12	175 1 2	0 0·56
Yearly totals of above items	5,388 5 0	2 7·70	5,501 7 3	2 11·79	5,190 18 10	4 5·49	5,305 15 7	4 2·45	4,861 9 8	2 4·79	5,099 18 1	1 4·40
Less Receipts	24 4 0	0 0·14	97 4 9	0 0·63	68 19 8	0 0·71	88 7 5	0 0·84	109 8 2	0 0·64	255 2 9	0 0·83
Net yearly cost	£5,364 1 0	2 7·56	£5,404 2 6	2 11·16	£5,121 19 2	4 4·78	£5,217 8 2	4 1·61	£4,752 1 6	2 4·15	£4,844 15 4	1 3·57
No. of Patients	1,147		843		652		716		1,037		1,765	
No. of Patient-days	40,781		36,887		23,290		25,240		40,515		74,636	

W. PENN-LEWIS, *Borough Treasurer.*

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* For details of Fuel see back.

Particulars.	Rate per Ton.	Year 1901-2.		Year 1902-3.		Year 1903-4.		Year 1904-5.		Year 1905-6.		Year 1906-7.	
		Weight.	Value.	Weight.	Value.	Weight.	Value.	Weight.	Value.	Weight.	Value.	Weight.	Value.
	s. d.	T. C. Q.	£ s. d.	T. C. Q.	£ s. d.	T. C. Q.	£ s. d.	T. C. Q.	£ s. d.	T. C. Q.	£ s. d.	T. C. Q.	£ s. d.
Coal ...	9/5½	—	—	—	—	—	—	—	—	—	—	78 17 2	37 6 0
,,	9/6	—	—	—	—	—	—	—	—	207 17 1	98 14 8	65 4 3	30 19 8
,, ...	10/-	1 9 2	0 14 9	—	—	—	—	—	—	—	—	—	—
,, ...	10/3	—	—	—	—	—	—	68 4 2	34 19 3	56 2 1	28 15 2	—	—
,, ...	10/6	—	—	—	—	185 11 0	97 8 5	210 0 3	110 5 8	—	—	—	—
,,	10/9	83 17 1	45 1 7	189 17 3	102 1 5	—	—	—	—	—	—	—	—
,,	11/3	—	—	96 6 2	54 3 11	82 2 0	46 3 8	—	—	—	—	—	—
,,	11/6	127 15 2	73 9 6	133 3 0	76 11 3	—	—	—	—	—	—	—	—
,, ...	11/9	17 11 3	10 6 9	—	—	—	—	—	—	—	—	9 1 3	5 6 8
,, ...	12/-	—	—	—	—	—	—	—	—	31 1 3	18 12 10	13 12 3	8 3 9
,, ...	12/3	569 7 2	348 15 0	—	—	—	—	—	—	—	—	—	—
,, ...	12/9	—	—	—	—	—	—	—	—	—	—	9 10 3	6 1 7
,, ...	13/-	445 15 0	289 14 11	—	—	—	—	—	—	—	—	—	—
,, ...	13/6	—	—	—	—	—	—	31 7 0	21 3 2	13 5 1	8 19 0	—	—
,, ...	14/6	—	—	13 17 2	10 1 2	26 18 2	19 10 5	12 0 0	8 14 0	—	—	—	—
,, ...	15/-	—	—	9 1 1	6 15 9	9 6 2	6 19 10	—	—	—	—	—	—
,, ...	16/-	48 7 0	38 13 7	21 2 3	16 18 4	—	—	—	—	—	—	—	—
,, ...	16/6	91 14 0	75 13 1	—	—	—	—	—	—	—	—	—	—
Slack ...	8/2	—	—	—	—	—	—	—	—	—	—	278 6 1	113 12 11
,, ...	8/3	—	—	—	—	—	—	148 7 3	61 4 3	1325 11 3	546 18 7	1151 10 3	475 0 4
,, ...	8/6	—	—	533 1 1	226 11 2	285 15 1	121 8 11	941 13 3	400 4 8	—	—	—	—
,, ...	8/9	57 4 2	25 0 9	772 1 3	337 15 11	891 7 1	389 19 11	—	—	—	—	41 10 1	18 3 4
,, ...	9/-	—	—	—	—	—	—	—	—	—	—	38 19 1	17 10 8
		1443 2 0	907 9 11	1768 11 3	830 18 11	1481 0 2	681 11 2	1411 13 3	636 11 0	1633 18 1	702 0 3	1686 14 0	712 4 11
Wood ...			2 11 9		—		—		—		—		
			£910 1 8		£830 18 11		£681 11 2		£636 11 0		£702 0 3		£712 4 11

TABLE C.

BOROUGH OF LEICESTER. ISOLATION HOSPITAL.

Expenditure from 1st April, 1906 to 31st March, 1907.

	£	s.	d.	£	s.	d.
Resident Medical Officer's Salary				120	0	0
Matron's Salary				80	0	0
Wages				1784	16	9
Provisions				1687	9	2
Mineral Waters, etc.				9	16	2
Domestic Utensils				35	9	6
Bedclothing, Towelling, etc.				179	7	2
Furniture and Fittings				159	0	0
Fuel, Light, and Water				831	12	7
Rates and Fire Insurance				217	12	11
Alterations and Repairs				213	16	7
Horsekeep				98	3	0
Telephone				16	10	4
Drugs, Disinfectants, etc.				197	13	8
Advertising, Printing, etc.				31	9	4
Labour, etc. at Grounds				39	11	11
Brushes, Soap, and Miscellaneous				163	1	10
				5865	10	11
LESS RECEIPTS—						
Maintenance of Patients	120	8	9			
Part Pumping Expenses Repaid	75	0	0			
Miscellaneous	59	14	0			
				255	2	9
Net Expenditure				£5610	8	2

W. PENN-LEWIS,

2nd May, 1907. *Borough Treasurer.*

Town Hall,
Leicester,
January 24th, 1907.

To the Chairman and Members of the Sanitary Committee.

Gentlemen,

My Report as Public Analyst for the year 1906 is as follows:—

The total number of samples purchased by your inspectors under the Food and Drugs Act and submitted for analysis during the year was 420. There were also other samples analysed, chiefly of milk from the Infants' Milk Depot. The number of samples was greater than for some years. The nature of the samples analysed is shown in Table A.

Milk.—Of the 215 samples of milk, only 5 were found to be adulterated. This is about the same proportion as in previous years, as shown by the following figures:—

Year.	Total Samples Analysed.	Deficient in Fat.	Added Water.	Total Adulterated.
1901	127	2	3	5*
1902	204	6	3	9†
1903	162	1	4	5‡
1904	206	1	3	4
1905	174	6	0	6
1906	215	3	2	5
Total for 6 years	1088	19	15	34

The average percentage of adulterated samples during the past six years has been 3·1 per cent.

Preservatives in Milk.—A memorandum having been received from the Local Government Board asking Local Authorities to prohibit entirely the use of preservatives in milk, a notice, a copy of which is appended, was issued to all the dairymen and milk sellers in the Borough. I believe that this warning has been

* Not inclusive of 7 samples just below legal standard.
† ,, ,, 1 ,, ,, ,, ,,
‡ ,, ,, 3 ,, ,, ,, ,,

generally acted upon. Seventy-two samples of milk have been examined for preservatives since the notice was issued, but in only one instance was a preservative (viz., boric acid) found. The vendor was communicated with and cautioned.

I believe that with the provision of proper refrigerating apparatus at the farms where the milk is obtained, so that milk can be cooled down immediately after milking and before transit, there is no need for preservatives; though, without refrigerators, there is undoubtedly a great difficulty in dispensing with them in hot weather.

Butter.—The number of samples of butter examined during the year was 147. A number of these samples were taken "informally," through an agent, and without the full formality required under the Food and Drugs Act being carried out, and without revealing the fact that the sample was for analysis. This was done at the suggestion of the Inspector of the Board of Agriculture, as in some places it had been found that in this way indications could be obtained of fraudulent practice not otherwise discoverable. Of course, in the event of a sample being found to be suspicious a further sample is taken and all the requirements of the Act complied with.

The number of samples found to be adulterated was three. Particulars of these appear in the table. In the case of number 107—the substitution of margarine for butter—the penalty inflicted, viz. £10, was larger than usual. It was thought a little severe at the time, but there is reason to think that it has had a salutary effect, as no further offence of this kind has since been detected. Number 385 was a case of milk-blended butter being sold without out any declaration being made (by label or otherwise) of the fact that it contained excess of moisture. The question of the sale of milk-blended butter is still unsettled.

In another case, not shown in the table, an Inspector had purchased a sample of butter, but on hearing that it was for analysis the vendor snatched the sample back and said he had made a mistake. He refused to restore the sample. He was prosecuted for obstructing the Inspector in the execution of his duty and was fined £5.

Number 383 was a sample of mustard which was found to contain 21 per cent. of added starch. It was decided to prosecute, and a fine of £5 was inflicted.

The defence was that it was "mustard condiment" sold by mistake for pure mustard.

Poisoning by Chlorodine Jujubes.—The following unusual case is worth recording:—

A lad, Cecil D——, age 15, an apprentice, purchased from a sweet shop one ounce of Chlorodine Jujubes for which he paid 1d. The box from which they were served was labelled "Superior Chlorodine Jujubes—a winter requisite—soothing, demulcent, expectorant. Perfectly safe to persons of all ages." The lad proceeded to eat the jujubes, one at a time (there were about fifteen in all), and shortly afterwards he began to feel "funny," turned giddy and lost consciousness. He became deeply comatose, with eyes fixed, sighing respiration, and marked pallor. His breath had a strong odour of chloroform. Prompt efforts were made to restore consciousness, but it was nearly three hours before he came round.

On analysis I found no trace of morphia in the jujubes, but chloroform to the extent of 17 minims to the ounce. As the boy appears to have eaten only an ounce, this was the amount of chloroform taken. The wholesale firm, who manufactured the jujubes, were communicated with, and admitted that the proportion of chloroform contained in them was too high, but stated that they had always believed that the greater part of the chloroform added in manufacturing was driven off in the process of "stoving." They also stated that they had never heard previously of any bad effects following, though they had used the same recipe for many years. They undertook, however, in future not to add more than five minims to the ounce.

The question of prosecution under the Sale of Poisons Act (for selling a poison without a proper label) was considered, but under the circumstances it was decided not to prosecute.

The usual Tables are appended.

C. KILLICK MILLARD,

Public Analyst.

BOROUGH OF LEICESTER.

SALE OF MILK—PRESERVATIVES.

The attention of the Sanitary Committee of the Leicester Town Council has been called to the Report of the Departmental Committee appointed by the Local Government Board to make enquiries with respect to the use of preservatives and colouring matter in food. This Departmental Committee after hearing evidence from milk traders conclude that the addition of a preservative is not necessary for the purposes of the milk trade even in hot weather or where the supply of a large town is concerned. The Local Government Board consequently require that preservatives shall not be added to milk.

I am instructed by the Sanitary Committee to inform you that for the future samples purchased for analysis will also be tested to detect the presence of any preservatives which may have been used and action will be taken under the Sale of Food and Drugs Acts where preservatives are found in samples.

By order of the Sanitary Committee,

(Signed) TOWN CLERK.

TABLE A.

Summary showing Number of Samples Analysed during 1906.

Nature of Samples.	1st Quarter.		2nd Quarter.		3rd Quarter.		4th Quarter.		Total for Year.	
	Samples taken.	Found Adulterated.	Samples taken.	Found Adulterated.	Samples taken.	Found Adulterated.	Samples taken.	Found Adulterated.	Samples taken.	Found Adulterated.
Milk	53	3	36	0	84	0	42	2	215	5
Butter	25	1	36	1	40	0	16	1	147	3
Bread	..	...	4	0	...	...	...	..	4	0
Coffee	6	0	...	...	4	1	1	0	14	1
Vinegar	...	...	...	...	...	...	6	0	6	0
Whiskey	...	...	...	...	...	...	2	0	2	0
Brandy	...	...	...	...	...	...	2	0	2	0
Rum	...	...	...	...	...	..	2	0	2	0
Gin	..	...	...	...	...	...	2	0	2	0
Mustard	6	0	1	0	...	...	4	1	14	1
Tartaric Acid	...	...	4	0	...	...	...	...	1	0
Cream of Tartar ...	...	...	1	0	...	...	...	..	4	0
Olive Oil	...	...	4	0	...	...	...	...	4	0
Total	90	4	92	1	128	1	110	1	420	10

TABLE B.

Particulars of Adulterated Samples in 1906.

No. of Sample.	Nature of Sample.	Nature and Amount of Adulteration.	Remarks, Action taken, etc.
5	New Milk ...	Deficient of 10 % of its normal fat ...	Prosecution. Vendor fined 20s. and costs.
9	New Milk ...	Deficient of 33·3 % of its normal fat ...	Prosecution. Vendor fined 20s. and costs.
36	New Milk ...	Deficient of 33·3 % of its normal fat ...	Prosecution. Vendor fined 20s. and costs.
47	Butter ...	Over 60 % of foreign fat	Prosecution. Fined 20s. and costs. See particulars in Report.
107	Butter ...	90 % of foreign fat	Prosecution. Vendor fined £10 and costs, or six weeks' imprisonment.
296	Coffee ...	28 % of chicory	Vendor cautioned.
379	New Milk ...	9 % per cent. of added water	Vendor cautioned.
385	Butter ...	26 % of moisture	Vendor cautioned.
383	Mustard ...	21 % of added starch	Prosecution. Vendor fined £5.
403	New Milk ...	6 % of added water	Vendor cautioned.

In addition to the above a butter-seller was summoned for obstructing an inspector, and fined £5. The offence was that of snatching back a sample after it had been purchased on hearing that it was intended for analysis.

MORTALITY TABLE.

CLASSIFICATION OF DEATHS IN 1906
ACCORDING TO CAUSE.

MORTALITY TABLE.

Deaths in the Borough of Leicester during the 52 Weeks ending December 31st, 1906.

	0 to 1		1 to 5		Under 5		5 to 20		20 to 40		40 to 60		60 to 80		80 and upwards		Over 5		All Ages		Total.
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
CLASS I																					
SPECIFIC FEBRILE OR ZYMOTIC DISEASES.																					
1.– Maismatic Diseases.																					
Smallpox: Vaccinated																					
Smallpox: Unvaccinated																					
Smallpox: Not known																					
Smallpox: Not stated																					
Measles	15	11	29	18	44	29	4	3									4	3	48	32	80
Scarlet Fever	2		13	15	15	15	9	10	2		1						12	10	27	25	52
Diphtheria			7	10	7	10	5	5									5	5	12	15	27
Whooping Cough	26	26	26	30	52	56	3	1									3	1	55	57	112
Typhus Fever																					
Enteric or Typhoid Fever							2	2	5	3		2					7	7	7	7	14
Simple Continued Fever																					
Other Maismatic Diseases										1	3		2	1			5	2	5	2	7
2.—Diarrhœal Diseases.																					
Dysentery								1										1		1	1
Diarrhœa	120	103	13	15	133	118	2	1		2			1		1		4	3	137	121	258
Cholera																					
3. Malarial Diseases.																					
Ague																					
Remittent Fever																					
4. Zoogenous Diseases.																					
Cowpox, and Effects of Vaccination																					
Hydrophobia																					
Glanders																					
Splenic Fever																					

5. Venereal Diseases.																				
Syphilis	2	5			2	5			1			1					1	1	3	6	9
Gonorrhœa, Stricture of Urethra											1						1		1		1
6. Septic Diseases.																					
Erysipelas													1	1			1	1	1	1	2
Pyæmia, Septicæmia...			1		1		1										1		2		2
Puerperal Fever										4								4		4	4
CLASS II.	165	145	89	88	251	233	26	23	8	10	5	3	4	2	1		44	38	298	271	569
PARASITIC DISEASES.																					
Thrush and other Vegetable Parasitic Diseases		1				1														1	1
Worms, Hydatids, and other Animal Parasitic Diseases																					
CLASS III.		1				1														1	1
DIETIC DISEASES.																					
Want of Breast Milk, Starvation ...																					
Purpura and Scurvy													1				1		1		1
Alcoholism { a. Delirium Tremens																					
Alcoholism { b. Intemperance ...									1	2	1	3	1				3	5	3	5	8
CLASS IV.									1	2	1	3	2				4	5	4	5	9
CONSTITUTIONAL DISEASES.																					
Rheumatic Fever											1						1		1		1
Rheumatism							1		2	1	1		1	3			5	4	5	4	9
Gout											1		1				2		2		2
Cancer, Malignant Disease				1		1	2		5	9	22	34	10	51		4	69	98	69	99	168
Cancrum Oris (Noma)																					
Rickets	7	10	5	2	12	12													12	12	24

DEATHS—continued.

	0 to 1		1 to 5		Under 5		5 to 20		20 to 40		40 to 60		60 to 80		80 and upwards.		Over 5		All Ages		Total.
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Tabes Mesenterica	3	1		1	3	2	1			1							1	1	4	3	7
Phthisis	9	5	7	5	16	10	17	35	97	63	62	25	9	5			185	128	201	138	339
Hydrocephalus and Tubercular Meningitis	6	4	11	16	17	20	10	6		1	1			1			11	8	28	28	56
Other forms of Tuberculosis	2	1	1	1	3	2		2				1						3	3	5	8
Scrofula																					
Anæmia, Chlorosis, Leucocythæmia			1		1				1		3		1				5		6		6
Diabetes									1	1	6	1	6	3			13	5	13	5	18
Other Constitutional Diseases	2			1	2	1	3				1	1					4	1	6	2	8
	29	21	25	27	54	48	34	43	106	76	98	62	58	63		4	296	248	350	296	646
CLASS V.																					
LOCAL DISEASES																					
1.—Diseases of Nervous System.																					
Inflammation of Brain or Membranes	3		1		4		1				1						2		6		6
Apoplexy, Softening of Brain, Paralysis		2				2	1		10	7	30	26	40	50	10	9	91	92	91	94	185
Insanity, General Paralysis of Insane											1	1					1	1	1	1	2
Chorea																					
Epilepsy			1		1		1	2	1	3	3	3	1	1			6	9	7	9	16
Convulsions	51	25	10	7	64	32			2								2		66	32	98
Laryngismus Stridulus				1		1														1	1
Disease of Spinal Cord, Paraplegia, Paralysis Agitans	1				1						2		1			1	3	1	4	1	5
Other Diseases of Nervous System									1	1	2						3	1	3	1	4
2. Diseases of Organs of Circulation.																					
Pericarditis and Endocarditis								3	1	1	1	1	2	3			4	8	4	8	12
Heart Disease	6	1	2		8	4	7	5	15	19	49	50	63	74	8	8	142	156	150	160	310
Aneurism									2		3			1			5	1	5	1	6
Embolism, Thrombosis												4		1				5		5	5
Other Diseases of Blood Vessels												1	1	1			1	2	1	2	3

3. Diseases of Respiratory Organs.																					
Laryngitis	2	1	4		6	1	1	1						1			1	2	7	3	10
Bronchitis	21	23	11	10	38	33			1	2	8	15	34	55	9	13	52	85	90	118	208
Pleurisy							1				1	1					2	1	2	1	3
Pneumonia	11	24	38	25	79	49	5	9	7	10	22	6	14	10	1	2	49	37	128	86	214
Asthma and Emphysema											3	1	4	1	1		8	5	8	5	13
Croup			1	1	1	1													1	1	2
Other Diseases of Respiratory Organs		1	1		1	1				1			1				1	1	2	2	4
4.—Diseases of Digestive Organs.																					
Gastritis	7	1	1		8	1			2		1		2	1			5	1	13	2	15
Other Diseases of Stomach	2		1		3					4		2						6	3	6	9
Enteritis	25	18	2	4	27	22	1			1	1	1				1	2	3	29	25	54
Peritonitis	4	4	1	5	5	9		3	1	5	2	1	2	1			5	10	10	19	29
Ascites																					
Obstructive Diseases of Intestines	2	3			2	3	3	4	2		7	3	3	3	1		16	10	18	13	31
Fistula													2				2		2		2
Pancreas Disease, etc.									4	2	4	3	5	2			13	7	13	7	20
Cirrhosis of Liver																					
Jaundice, and other Diseases of Liver																					
5.—Diseases of Urinary Organs.																					
Nephritis	1		1		2		2	2	4	1	4	4	6	7	1		17	14	19	14	33
Bright's Disease (Albuminuria)	1			1	1	1			3	1	5	1	3	4			11	6	12	7	19
Diseases of Bladder or Prostrate													7	2			7	2	7	2	9
Calculus (Stone)													2				2		2		2
Other Diseases of Urinary System									2	1	3	3	4	2			9	6	9	6	15
6. Diseases of Reproductive System.																					
(a) Organ of Generation.																					
Male Organs																					
Female Organs																					

DEATHS—continued.

	0 to 1		1 to 5		Under 5		5 to 20		20 to 40		40 to 60		60 to 80		80 and upwards.		Over 5		All Ages		Total.
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
(b) Of Parturition.																					
Abortion, Miscarriage										2								2		2	2
Puerperal Convulsions																					
Placenta Prævia, Flooding ...										1								1		1	1
Other Accidents of Childbirth										9		2						11		11	11
7.—Diseases of Integumentary System.																					
Phlegmon																					
Ulcer, Carbuncle				1		1			1		1		1				3		3	1	4
Other Diseases of Skin, etc.		1				1														1	1
8.—Diseases of Bones and Joints.																					
Caries and Necrosis ...	1				1		1						1				2		3		3
Arthritis, Ostitis, Periostitis	1	1			1	1	1			1	1	1	3	1			5	3	6	4	10
Other Diseases of Bones and Joints								1	1	1	2			1		1	3	4	3	4	7
9.—Diseases of Organs of Special Sense.																					
Ear, Eye, Nose	1		1		2						1						1		3		3
10.—Diseases of Lymphatic System, etc.																					
Lymphatics and Spleen											1						1		1		1
Bronchocele, Addison's Disease										1	1						1	1	1	1	2
Quinsy																					
	176	108	79	55	255	163	25	30	60	74	160	130	202	225	31	35	478	494	733	657	1390

CLASS VI.																					
DEVELOPMENTAL DISEASES.																					
Premature Birth	88	68			88	68													88	68	156
Atelectasis	1	2			1	2													1	2	3
Congenital Malformations	5	1		1	5	2													5	2	7
Teething	2	4	2	4	4	8													4	8	12
Atrophy, Inanition, Debility	69	58	18	12	87	70					1	1		1			1	2	88	72	160
Old Age											1		40	60	16	60	87	120	87	120	207
	165	133	20	17	185	150					2	1	40	61	16	60	88	122	273	272	545
CLASS VII.																					
DEATHS FROM VIOLENCE.																					
1. Accident or Negligence.																					
Fracture and Contusions			2	1	2	1	3	1	4		6	2	4	2		1	17	6	19	7	26
Gunshot Wounds																					
Cut, Stab																					
Burns and Scalds	1		4	7	5	7				1		3		1				5	5	12	17
Poison												1						1		1	1
Drowning			1		1		1		5	2	7	1	1				14	3	15	3	18
Suffocation	6	11	1	1	7	12	1							1			1	1	8	13	21
Otherwise																					
2.—Homicide.																					
Manslaughter																					
Murder	1				1														1		1
3.—Suicide.									2	2	4		3	1			9	3	9	3	12
	8	11	8	9	16	20	5	1	11	5	17	7	8	5		1	41	19	57	39	96

DEATHS—continued.

	0 to 1		1 to 5		Under 5		5 to 20		20 to 40		40 to 60		60 to 80		80 and upwards.		Over 5		All Ages		Total.
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
CLASS VII. **DEATHS FROM ILL-DEFINED AND NOT SPECIFIED CAUSES.** (*e.g.*, Dropsy, Abscess, Tumour, Hæmorrhage, Mortification, Death from Natural Causes, etc.)	5	8	3	2	8	10	5	3	6	10	13	7	14	7	.....	2	38	29	46	39	85
	5	8	3	2	8	10	5	3	6	10	13	7	14	7	.....	2	38	29	46	39	85
Class I.—Zymotic Diseases	165	145	89	88	254	233	26	23	8	10	5	3	4	2	1	.....	44	38	298	271	569
,, **II.—Parasitic Diseases**	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
,, **III.—Dietic Diseases**	.....	.....	.....	.....	.....	.....	.....	.....	1	2	1	3	2	.....	.....	.....	4	5	4	5	9
,, **IV.—Constitutional Diseases** ...	29	21	25	27	54	48	34	43	106	76	98	62	58	63	.....	4	296	248	350	296	646
,, **V.—Local Diseases**	176	108	79	55	255	163	25	30	60	74	160	130	202	225	31	35	478	494	733	657	1390
,, **VI.—Developmental Diseases** ..	165	133	20	17	185	150	.....	.....	.....	.....	2	1	40	61	46	60	88	122	273	272	545
,, **VII.—Violent Deaths**	8	11	8	9	16	20	5	1	11	5	17	7	8	5	.....	1	41	19	57	39	96
,, **VIII.—Ill-Defined, etc.**	5	8	3	2	8	10	5	3	6	10	13	7	14	7	.....	2	38	29	46	39	85
	548	427	224	198	772	625	95	100	192	177	296	213	328	363	78	102	989	955	1761	1580	3341

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